TSD File Inventory Index

Date: Sept. 8, 2006

Initial: C Mikesell/ao

Facility Name: CBI Industries, Inc. (Core Folder/Site)

Facility Identification Number: ILD 082 939 588

A.1 General Correspondence		**B.2 Permit Docket (B.1.2)**	
A.2 Part A / Interim Status		.1 Correspondence	
.1 Correspondence	V	.2 All Other Permitting Documents (Not Part of the ARA)	
.2 Notification and Acknowledgment	V	**C.1 Compliance - (Inspection Reports)**	
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.4 Financial Insurance (Sudden, Non Sudden)	X	.1 Land Disposal Restriction Notifications	
.5 Change Under Interim Status Requests		.2 Import/Export Notifications	
.6 Annual and Biennial Reports		**C.3 FOIA Exemptions - Non-Releasable Documents**	
A.3 Groundwater Monitoring		**D.1 Corrective Action/Facility Assessment**	V
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.2 Reports		.2 Background Reports, Supporting Docs and Studies	
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.1 Correspondence		.4 RFA Reports	X
.2 Closure/Post Closure Plans, Certificates, etc		**D. 2 Corrective Action/Facility Investigation**	
A.5 Ambient Air Monitoring		.1 RFI Correspondence	
.1 Correspondence		.2 RFI Workplan	
.2 Reports		.3 RFI Program Reports and Oversight	
.1 **Administrative Record**		.4 RFI Draft /Final Report	
		5 RFI SAPP	

Total — 1

.6 RFI QAPP Correspondence		.8 Progress Reports	
.7 Lab Data, Soil-Sampling/Groundwater		**D.5 Corrective Action/Enforcement**	
.8 RFI Progress Reports		.1 Administrative Record 3008(h) Order	
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.3 CMS Workplan		.2 Reports	
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.7 Lab Data, Soil-Sampling/Groundwater		.2 Compliance and Enforcement	
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.2 CMI Workplan		.5 Permitting	
.3 CMI Program Reports and Oversight		.6 Corrective Action Remediation Study	
.4 CMI Draft/Final Reports		.7 Corrective Action/Remediation Implementation	
.5 CMI QAPP		.8 Endangered Species Act	
.6 CMI QAPP Correspondence		.9 Environmental Justice	
1 Lab Data - Soil Sampling / Groundwater			

Note: Transmittal Letter to Be Included with Reports.
Comments: One folder total

A.2 Part A/
Interim Status

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
RCRA ACTIVITIES

APR 14 1982

Lawrence Laska
Chicago Bridge & Iron Company
Route 59
Plainfield, Illinois 60544

RE: Interim Status Acknowledgement USEPA ID No. ILD082939588
FACILITY NAME: Chicago Bridge & Iron Company

Dear Mr. Laska:

This is to acknowledge that the U.S. Environmental Protection Agency (USEPA) has completed processing your Part A Hazardous Waste Permit Application. It is the opinion of this office that the information submitted is complete and that you, as an owner or operator of a hazardous waste management facility, have met the requirements of Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) for Interim Status. However, should USEPA obtain information which indicates that your application was incomplete or inaccurate, you may be requested to provide further documentation of your claim for Interim Status. Our opinion will be reevaluated on the basis of this information.

As an owner or operator of a hazardous waste management facility, you are required to comply with the interim status standards as prescribed in 40 CFR Parts 122 and 265, or with State rules and regulations in those States which have been authorized under Section 3006 of RCRA. In addition, you are reminded that operating under interim status does not relieve you from the need to comply with all applicable State and local requirements.

The printout enclosed with this letter identifies the limit(s) of the process design capacities your facility may use during the interim status period. This information was obtained from your Part A Permit application. If you wish to handle new wastes, to change processes, to increase the design capacity of existing processes, or to change ownership or operational control of the facility, you may do so only as provided in 40 CFR Sections 122.22 and 122.23.

As stated in the first paragraph of this letter, you have met the requirements of 40 CFR Part 122.23; your facility may operate under interim status until such time as a permit is issued or denied. This will be preceded by a request from this office or the State (if authorized) for Part B of your application. Please contact Arthur Kawatachi of my staff at (312) 886-7449, if you have any questions concerning this letter or the enclosure.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosure

cc: James B. Maher - Chicao Bridge & Iron Company

ATC 4/14/82

Part A file

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER ➤ ILD082939588 REACKNOWLEDGEMENT

CHICAGO BRIDGE AND IRON COMPANY
ROUTE 59
PLAINFIELD IL 60544

INSTALLATION ADDRESS ➤

ROUTE 59
PLAINFIELD IL 60544

EPA Form 8700-12B (4-80)

09/28/81

Please print or type with ELITE type *(12 characters/incl.* the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA [illegible] 0246-EPA-OT

EPA — U.S. ENVIRONMENTAL PROTECTION AGENCY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.	
I. NAME OF INSTALLATION	
II. INSTALLATION MAILING ADDRESS	PLEASE PLACE LABEL IN THIS SPACE 000238 AUG 14 80
III. LOCATION OF INSTALLATION	ILD082939588

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED (yr., mo., & day)
F ILD082939588 2 1	A	80 08 18

I. NAME OF INSTALLATION
CHICAGO BRIDGE AND IRON COMPANY

II. INSTALLATION MAILING ADDRESS
STREET OR P.O. BOX: 3 ROUTE 59

CITY OR TOWN: 4 PLAINFIELD — ST.: IL — ZIP CODE: 60544

III. LOCATION OF INSTALLATION
STREET OR ROUTE NUMBER: 5 SAME

CITY OR TOWN: 6 — ST. — ZIP CODE

IV. INSTALLATION CONTACT
NAME AND TITLE *(last, first, & job title)*: 2 LASKA LAWRENCE MGR RESEARH SER — PHONE NO. *(area code & no.)*: 815-436-2912

V. OWNERSHIP
A. NAME OF INSTALLATION'S LEGAL OWNER: 8 CHICAGO BRIDGE AND IRON COMPANY

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*: M
F = FEDERAL
M = NON–FEDERAL

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*
- [X] A. GENERATION
- [ ] B. TRANSPORTATION *(complete item VII)*
- [X] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*
- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify):*

VIII. FIRST OR SUBSEQUENT NOTIFICATION
Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.: ILD082939588

IX. DESCRIPTION OF HAZARDOUS WASTES
Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

AUG 13 1980 AUG [illegible] 1980

CONTINUE ON REVERSE

I.D. – FOR OFFICIAL USE ONLY

S													T/A	C
W	I	K	D	0	8	2	9	3	9	5	8	8	2	1
1	2											13	14	15

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F001	F005				
7	**8**	**9**	**10**	**11**	**12**

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	**20**	**21**	**22**	**23**	**24**
25	**26**	**27**	**28**	**29**	**30**

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
P018	P105	P106	U001	U002	U013
37	**38**	**39**	**40**	**41**	**42**
U019	U021	U029	U044	U112	U123
43	**44**	**45**	**46**	**47**	**48**
U134	U135	U140	U147	U151	U154

CONT. ON NEXT SHT.

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

☐ 1. IGNITABLE (D001) ☐ 2. CORROSIVE (D002) ☐ 3. REACTIVE (D003) ☐ 4. TOXIC (D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
James B. Maher	JAMES B. MAHER VICE PRES. – DIRECTOR OF RESEARCH	8-11-80

I.D. – OFFICIAL USE ONLY

S												T/A	C
W	I	L	D	0	8	2	9	3	9	5	8	8	2	1
1	2										13	14	15	

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
7	**8**	**9**	**10**	**11**	**12**

DETACH

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	**20**	**21**	**22**	**23**	**24**
25	**26**	**27**	**28**	**29**	**30**

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

CONT. FROM PREVIOUS SHT.

~~31~~	~~32~~	~~33~~	~~34~~	~~35~~	~~36~~
U159	U161	U165	U169	U188	U190
~~37~~	~~38~~	~~39~~	~~40~~	~~41~~	~~42~~
U196	U213	U219	U220	U223	U226
~~43~~	~~44~~	~~45~~	~~46~~	~~47~~	~~48~~
U239					

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

☐ 1. IGNITABLE (D001) ☐ 2. CORROSIVE (D002) ☐ 3. REACTIVE (D003) ☐ 4. TOXIC (D000)

X. CERTIFICATION

DETACH

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
James B. Maher	JAMES B. MAHER VICE PRES. – DIRECTOR OF RESEARCH	8-11-80

EPA Form 8700-12 (6-80) REVERSE

AUG 13 1980

CBI

Chicago Bridge & Iron Company

800 Jorie Boulevard
Oak Brook, Illinois 60521
312 654 7000

March 12, 1985

U.S. Environmental Protection Agency
Region V
Waste Management Division
230 South Dearborn
Chicago, Illinois 60604

Attention: Edith Ardiente

Reference: Amendment to Permit Application
EPA ID ~~#ILD009105512~~ ILD082939588 G, TSD, PA

Dear Ms. Ardiente:

The Illinois EPA has advised me that yours is the appropriate office to advise of a change in information contained in the permit application filed under the above referenced EPA identification number. This application relates to a research facility located in Plainfield, Illinois. We request that the name of the operator of the facility be changed on the permit application from "Chicago Bridge & Iron Company" to "CBI Industries, Inc."

At the time the application was filed the operator of the facility was Chicago Bridge & Iron Company. Chicago Bridge & Iron Company is a wholly-owned subsidiary of CBI Industries, Inc. CBI Industries, Inc. is the holding company of a number of corporations. As the Plainfield facility provides reseach services for subsidiaries in addition to Chicago Bridge & Iron Company, it was determined that operation of this facility was a holding company function. Personnel at this site have been transferred from the Chicago Bridge & Iron Company's to the CBI Industries, Inc.'s payroll. They report to the CBI Industries, Inc.'s management rather than the Chicago Bridge & Iron Company's management.

In all other respects nothing has changed at the Plainfield facility. The personnel, procedures, facility set-up and facility contact all remain the same. The property and building continue to be owned by Chicago Bridge & Iron Company. Financial assurance for closure and post-closure costs has in the past (even when the facility was operated by Chicago Bridge & Iron Company) been provided by the parent holding company, CBI Industries, Inc. This change will, therefore, not require that a different mechanism be established for financial assurance.

If there are any questions or problems with respect to the making of this change to the pending permit application please advise the undersigned at (312)654-7489.

Sincerely,

Charlotte C. Toerber
Associate General Counsel

atn

cc: Rama K. Chaturuedi, P.E. Manager
Permit Program Development Unit
Permit Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

RE: 197080003 - Will County
Plainfield/Chicago Bridge & Iron Company

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

526

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F	I	L	D	0	8	2	9	3	9	5	8	8	3	D
1	2										13		14	15

LABEL ITEMS

- II. EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING ADDRESS
- VI. FACILITY LOCATION

ILD082939588

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill—in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill—in area*(s)* below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold—faced terms.**

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.?** (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.?** (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.?** (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of **hazardous wastes?** (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area?** (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area?** (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP CHICAGO BRIDGE AND IRON RESEARCH CENTER

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*		
2 LASKA LAWRENCE MGR RES. SERV.	815	436	2912

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 ROUTE 59

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 PLAINFIELD	IL	60544

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 ROUTE 59

B. COUNTY NAME

WILL

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 PLAINFIELD	IL	60544	197

NOV 18 1980

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
(specify) 3443 FABRICATED PLATE WORKS (BOILER SHOP)	(specify) 1629 HEAVY CONSTRUCTION NOT ELSEWHERE SPECIFIED
C. THIRD	**D. FOURTH**
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME: CHICAGO BRIDGE & IRON CO.

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL; S = STATE; P = PRIVATE; M = PUBLIC (other than federal or state); O = OTHER (specify)
P (specify) PRIVATE

D. PHONE (area code & no.): 815 436 2912

E. STREET OR P.O. BOX: ROUTE 59

F. CITY OR TOWN: PLAINFIELD

G. STATE: IL

H. ZIP CODE: 60544

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): 9 N	D. PSD (Air Emissions from Proposed Sources): 9 P
B. UIC (Underground Injection of Fluids): 9 U	E. OTHER (specify): 9 (specify)
C. RCRA (Hazardous Wastes): 9 R	E. OTHER (specify): 9 (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. F9 A/50

XII. NATURE OF BUSINESS (provide a brief description)

Chicago Bridge & Iron Company is engaged in the design, fabrication and construction of large metal plate products, structures and related systems, and thus acts as a service industry to other industries, utilities and governmental bodies. The company's principal products include pertoleum, petro-chemical and chemical storage tanks, process and pressure or vacuum vessels, nuclear reactor and containment vessels, water storage tanks, low temperature and cryogenic liquefaction and storage facilities, hydro-electric penstocks, spiral cases, tunnel liners and surge tanks, fixed and shipmounted marine structures, oxygen converter vessels, tanks and bins for granular storage and water and waste treatment equipment. Our Plainfield Research Center provides R&D for our entire range of products. F9 A/51

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
VICE PRES. - DIRECTOR OF RESEARCH	James B. Mahon	11-12-80

COMMENTS FOR OFFICIAL USE ONLY

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

526

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F | NO APPLIED FOR | 3 | 1

ILDD82939588

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

YR.	MO.	DAY
67	01	01

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. **PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. **PROCESS DESIGN CAPACITY** – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP 3 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G	
X-2	T03	20	E	
1	S02	1000000	G	
	S01	1100000	G	
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
5				
6				
7				
8				
9				
10				

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Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** – For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate **all** the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

526

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)

S													T/A	C
W	"NO - APPLIED FOR"												3	1
1	2	ILD 000393988										13	14	15

FOR OFFICIAL USE ONLY

S													T/A	C										
W	DUP													2	DUP									
1	2											13	14	15	23	-								26

V. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
	23 - 26	27 - 35	36	27 - 29 / 27 - 29 / 27 - 29 / 27 - 29	
1	F001	10 000	P	S02	
2	F005	10 000	P	S02	
3	P018	10 000	P	S02	
4	P105	10 000	P	S02	
5	P106	10 000	P	S02	
6	U001	20 000	P	S02	
7	U002	20 000	P	S02	
8	~~U013~~	~~20 000~~	~~P~~	~~S02~~	
9	U019	400 000	P	S02	
10	U021	10 000	P	S02	
11	U029	10 000	P	S02	
12	U044	10 000	P	S02	
13	U112	10 000	P	S02	
14	U123	10 000	P	S02	
15	U134	10 000	P	S02	
16	U135	10 000	P	S02	
17	U140	20 000	P	S02	
18	U147	10 000	P	S02	
19	U151	10 000	P	S02	
20	U154	10 000	P	S02	
21	U159	10 000	P	S02	
22	U161	10 000	P	S02	
23	U165	10 000	P	S02	
24	U169	10 000	P	S02	
25	U188	10 000	P	S02	
26	U190	10 000	P	S02	

EPA Form 3510-3 (6-80)

CONTINUED ON FOLLOWING SHEET

(enter "A", "B", "C", etc. behind the "3" to identify photocopied pages)

NOV 18 1980

CONTINUE ON REVERSE

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTE (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)

F 1 2 NO-APPLIED FOR ILD 082939588 13 | T/A 14 3 | C 15 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).* F6 A/55

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground–level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).* F6 A/56

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
41 (15 16) 37 (17 18) 25 Ø (19 - 21)	088 (22 - 24) 12 (25 26) ~~07~~ Ø7Ø (27 - 29)

VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)
E 15 16 - 55	56 - 58 ~ 59 - 61 ~ 62 - 65

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F 15 16 - 45	G 15 16 - 40	41 42	47 - 51

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
JAMES B. MAHER	James B. Maher	11-12-80

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED

ITEM IV CONTINUED 526

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)															FOR OFFICIAL USE ONLY													
S												T/A	C		S										T/A	C		
W	-	-	D	Ø	8	2	9	3	9	5	8	8	3	1	W	D	U	P							2	D	U	P
1	2										13	14	15		1	2									14	15			

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
	23 - 26	27 - 35	36	27 - 29	27 - 29	27 - 29	27 - 29	
1	U196	10,000	P	S02				
2	U213	10,000	P	S02				
3	U219	10,000	P	S02				
4	U220	50,000	P	S02				
5	U223	40,000,000	P	S01				
6	U226	40,000,000	P	S02				
7	U239	100,000	P	S02				
8								
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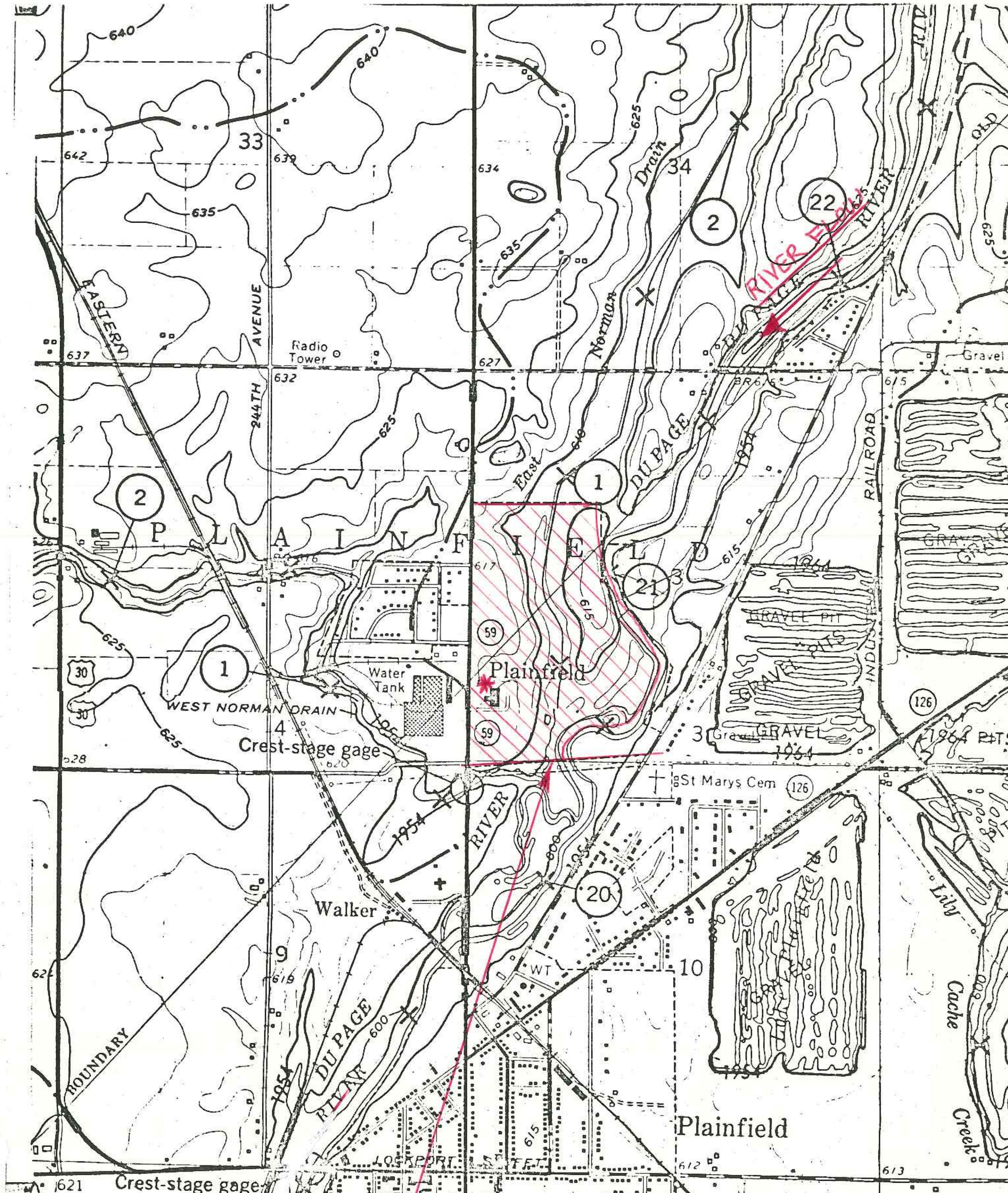
25								
26								
	23 - 26	27 - 35	36	27 - 29	27 - 29	27 - 29	27 - 29	

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

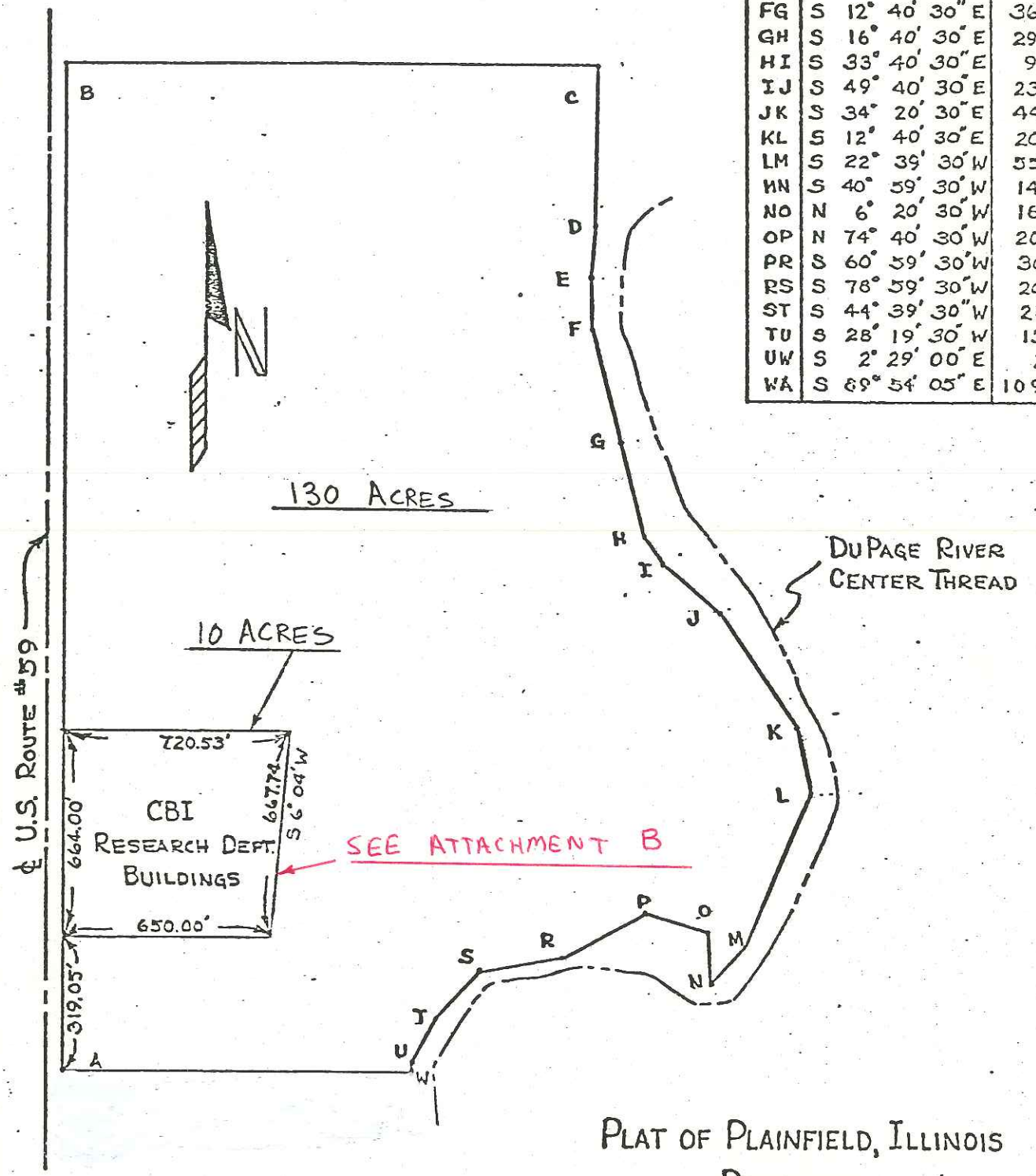
526



* LAT. E-W 41°-37'-25"
LONG. N-S 88°-12'-7"
N SCALE = 1/4" = 420'

CHICAGO BRIDGE & IRON RESEARCH CENTER PROPERTY
SEE ATTACHMENTS A & B

LINE	BEARING	LENGTH
AB	N 00° 05' 45" W	3180.71'
BC	N 89° 47' 00" E	1618.72'
CD	S 00° 13' 00" E	540.54'
DE	S 5° 17' 00" W	126.67'
EF	S 2° 20' 30" E	172.53'
FG	S 12° 40' 30" E	365.60'
GH	S 16° 40' 30" E	297.93'
HI	S 33° 40' 30" E	99.65'
IJ	S 49° 40' 30" E	230.13'
JK	S 34° 20' 30" E	447.80'
KL	S 12° 40' 30" E	209.42'
LM	S 22° 39' 30" W	533.40'
MN	S 40° 59' 30" W	147.20'
NO	N 6° 20' 30" W	160.27'
OP	N 74° 40' 30" W	207.16'
PR	S 60° 59' 30" W	301.26'
RS	S 78° 59' 30" W	204.83'
ST	S 44° 39' 30" W	211.87'
TU	S 28° 19' 30" W	151.49'
UW	S 2° 29' 00" E	22.00'
WA	S 89° 54' 05" E	1091.16'

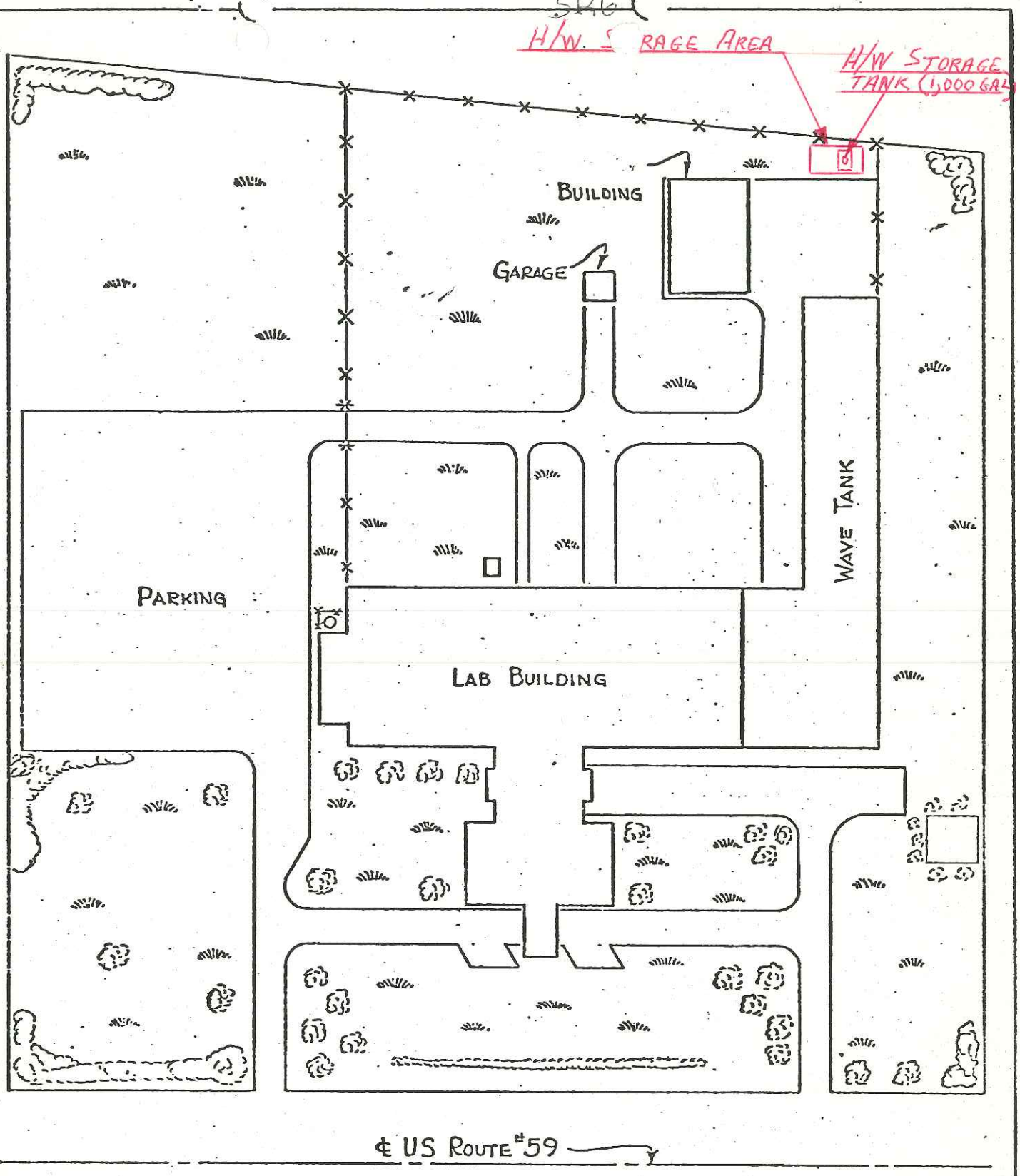


PLAT OF PLAINFIELD, ILLINOIS
PROPERTY
CHICAGO BRIDGE & IRON CO.

0 250 500 1000
SCALE 1"=500'

ATTACHMENT A

5R16



BUILDING LAYOUT OF
PLAINFIELD, ILLINOIS PROPERTY
CHICAGO BRIDGE & IRON CO.

0 50 100 200

SCALE 1" = 100'

ATTACHMENT B

526

LEGAL DESCRIPTION
CHICAGO BRIDGE & IRON COMPANY
PLAINFIELD RESEARCH CENTER PROPERTY

"That part of the West 1/2 of Section 3 and the Northwest 1/4 of Section 10 in Township 36 North and in Range 9 East of the Third Principal Meridian in Will County, Illinois described as follows: Beginning at the point of intersection of the West line of said Northwest 1/4 of Section 10 and the Northerly line of the right of way of the Public Service Company of Northern Illinois as recorded in Book 660, page 26 as Document No. 400720; thence Northerly along said West line of the Northwest 1/4 of Section 10 to the Northwest corner of said Northwest 1/4 of Section 10; thence continuing Northerly along the West line of the Southwest 1/4 of Section 3, a distance of 14.89 chains to a point; thence North 43 degrees East along with the Indian Boundary Line, 1.65 chains to a point, thence Northerly along the West line of said Section 3, 35.75 chains to a point thence East 25.29 chains to a point, thence South 8.19 chains to a point, thence East 3.50 chains more or less to the center thread of the DuPage River thence Southerly along the sinuosities of said center thread of the DuPage River to the Northerly right-of-way line of said Public Service Company right of way thence Southwesterly along said Northerly line of the Public Service Company right-of-way to the point of beginning, excepting from such tract the following described 3 parcels designated Parcel I, II and III.

PARCEL I

That parcel conveyed to Continental Can Company, Inc., by Document No. 889928, described as that part of said Southwest 1/4 of Section 3 described as follows: Commencing at the intersection of the South line of the Southwest 1/4 of said Section 3 with the Easterly right-of-way line of U.S. Route No. 59; thence North along said right-of-way line 564.47 feet to the point of beginning, thence continuing North alongside right-of-way line 664 feet thence East 720.53 feet thence South 6 degrees 4 minutes West 667.74 feet thence West 650 feet to the point of beginning.

PARCEL II

That parcel conveyed to Continental Can Co., Inc., by Document No. 895642 being that part of U.S. Route No. 59 abutting the Westerly line of the property conveyed by said Document No. 889928 above, all in Will County, Illinois."

PARCEL III

"That part of the West 1/2 of Section 3 and the Northwest 1/4 of Section 10 in Township 36 North and in Range 9 East of the Third Principal meridian in Will County, Illinois described as follows:

Beginning at the point of intersection of the West line of said Northwest 1/4 of Section 10 and the Northerly line of the right-of-way of the Public Service Company of Northern Illinois as recorded in Book 660, page 26 as Document No. 400720; thence Northerly along said West line of the Northwest 1/4 of Section 10 to the Northwest corner of said Northwest 1/4 of Section 10, thence continuing Northerly along the West line of the Southwest 1/4 of Section 3, a distance of 243.30' to a point; thence South 89°-54'-05" East along a line parallel with the South line of the West 1/2 of said Section 3 to a point on the Easterly right-of-way line of Illinois Route #59; thence continue South 89° - 54'-05" East along a line parallel with the South line of the West 1/2 of said Section 3, 1091.16'; thence continue South 89°-54'-05" East along a line parallel with the South line of the West 1/2 of said Section 3, 46' more or less to the center thread of the DuPage River; thence Southerly along the sinuosities of the said center thread of the DuPage River to the Northerly right-of-way line of said Public Service Company right-of-way; thence South 84°-31' West along the Northerly right-of-way line of said Public Service right-of-way, 70' more or less; thence continue South 84°-31' West along the Northerly right-of-way line of said Public Service Company right-of-way, 1109.00' to a point on the Easterly right-of-way line of Illinois Route #59; thence continue South 84°-31' West along the Northerly right-of-way line of said Public Service Company right-of-way to the point of beginning containing 6.88 acres more or less."

Continued from page 4.

Form Approved OMB No. 158-S80004

V. FACILITY DRAWING *(see page 4)*

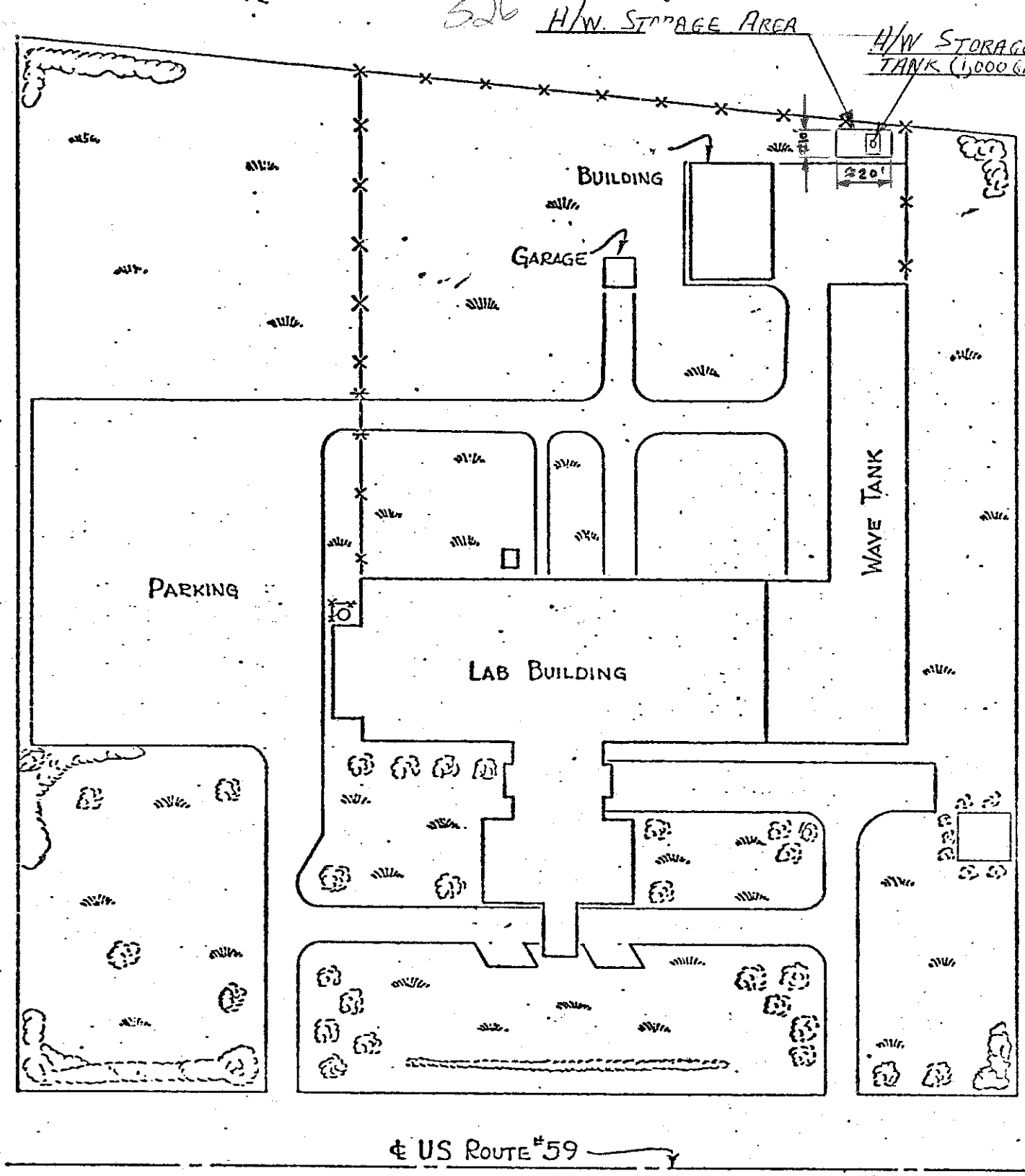
SEE ATTACHMENTS A&B

ATTACHMENT C

5216

STORAGE TANK & 55 GAL.
STORAGE DRUMS

VI.



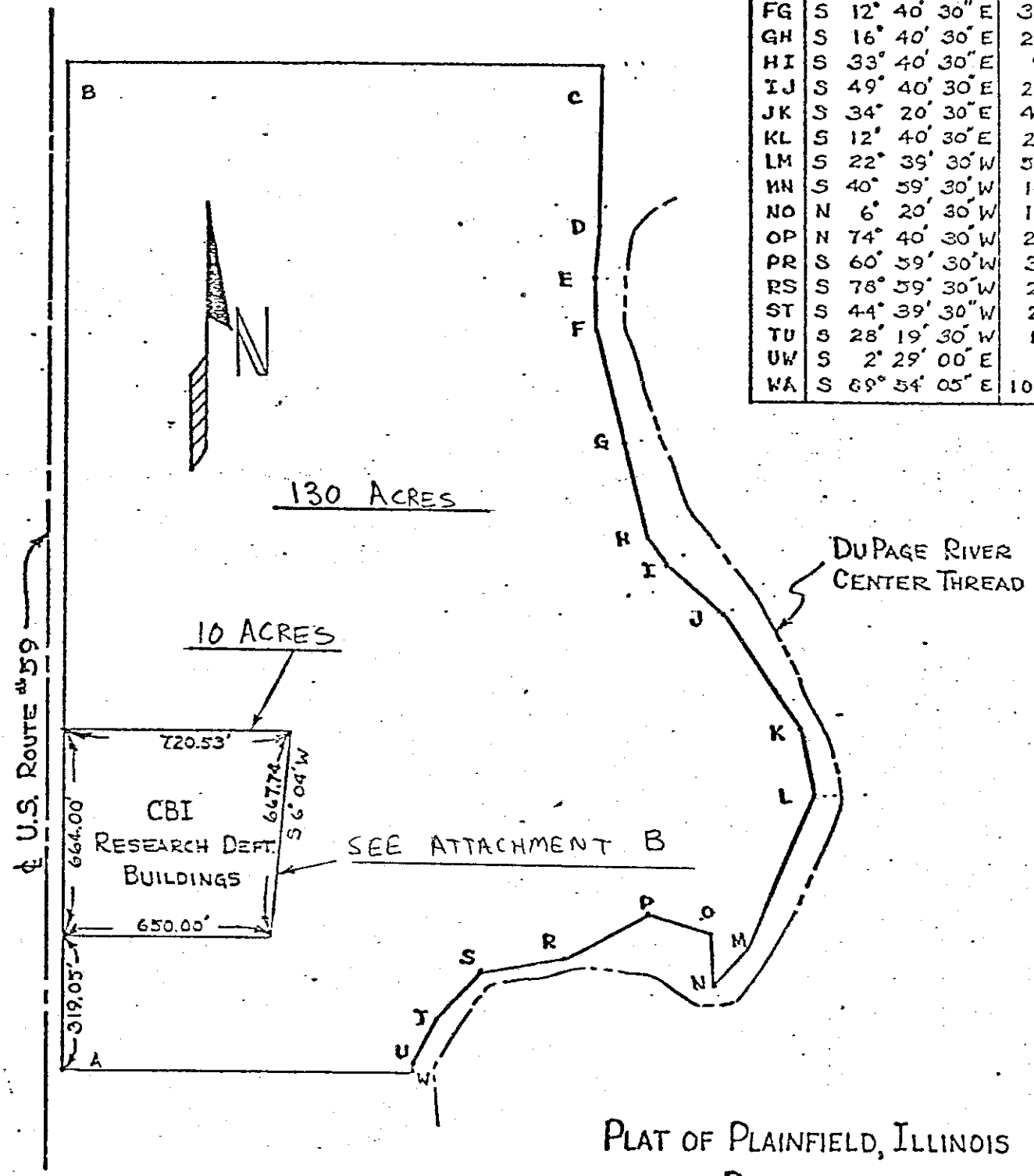
BUILDING LAYOUT OF
PLAINFIELD, ILLINOIS PROPERTY
CHICAGO BRIDGE & IRON CO.

0 50 100 200

SCALE 1" = 100'

ATTACHMENT B

LINE	BEARING	LENGTH
AB	N 00° 05' 45" W	3180.71'
BC	N 89° 47' 00" E	1618.72'
CD	S 00° 13' 00" E	540.54'
DE	S 5° 17' 00" W	126.67'
EF	S 2° 20' 30" E	172.53'
FG	S 12° 40' 30" E	365.60'
GH	S 16° 40' 30" E	297.93'
HI	S 33° 40' 30" E	99.65'
IJ	S 49° 40' 30" E	230.13'
JK	S 34° 20' 30" E	447.80'
KL	S 12° 40' 30" E	209.42'
LM	S 22° 39' 30" W	553.40'
MN	S 40° 59' 30" W	147.20'
NO	N 6° 20' 30" W	160.27'
OP	N 74° 40' 30" W	207.16'
PR	S 60° 59' 30" W	301.26'
RS	S 78° 59' 30" W	204.83'
ST	S 44° 39' 30" W	211.87'
TU	S 28° 19' 30" W	151.49'
UW	S 2° 29' 00" E	22.00'
WA	S 69° 54' 05" E	1091.16'



PLAT OF PLAINFIELD, ILLINOIS
PROPERTY
CHICAGO BRIDGE & IRON CO.

0 250 500 1000
SCALE 1"=500'

ATTACHMENT A

FEB 07 1990

5HR-12

Mr. Lawrence Laska
Facility Representative
Chicago Bridge & Iron Company
1501 North Division Street
Plainfield, Illinois 60544

Re: Chicago Bridge & Iron Company
ILD 082 939 588

Dear Mr. Laska:

The United States Environmental Protection Agency has reviewed the information which you submitted to this office on January 31, 1990. The stated actions appear to adequately address the land disposal restrictions deficiency outlined in our January 24, 1990, Notice of Violation.

Your cooperation and efforts in this matter are appreciated. Should you have further questions, please feel free to contact Ms. Barbara Russell of my staff at (312) 353-7922.

Sincerely yours,

Paul E. Dimock, Chief
IL/MI/WI Enforcement Program Section

cc: Glenn Savage, IEPA, FOS
Harry Chappel, IEPA, CMS
5HR-12:B. RUSSELL:ev:02/07/90:3-7928:DISK#3 :PC FILENAME:laska

EV 2-7-90

RCRA ENFORCEMENT	RCB STAFF	RCB SECTION CHIEF	RCB CHIEF
INIT. DATE	BR 2/7/90	PSD 2-7-90	

CBI
Chicago Bridge & Iron
Technical Services Company
Research Center
1501 North Division Street
Plainfield, Illinois 60544-8929
815 436 2912
FAX: 815 436 8345

January 31, 1990

Paul E. Dimock, Chief
IL/MI/WI Enforcement Program Section
United States Environmental Protection Agency
Region 5
230 South Dearborn Street
Chicago, Illinois 60604

Attn: 5HR-12

Re: Notice of Violation
Chicago Bridge & Iron Co.
ILD 082 939 588

Dear Mr. Dimock:

In reference to your Notice of Violation letter of January 24, 1990, our response and resolution is the following:

In the future we will attach to the manifest the attached sheet for each shipment of restricted wastes listing the U.S. EPA hazardous waste numbers, the applicable treatment standards, manifest number, and waste analysis data, where applicable, as required by Section 268.7(a)(1).

If you have any further questions, please give me a call. Thank you.

Sincerely,

Lawrence J. Laska

Lawrence J. Laska
Director of Research Services

paw

RCRA LAND DISPOSAL RESTRICTIONS

GENERATOR NOTIFICATION TO TREATMENT FACILITY WHERE RESTRICTED WASTE REQUIRES TREATMENT PRIOR TO LAND DISPOSAL

This Notification is submitted to _____, in accordance with regulations effective November 8, 1986, to be promulgated at 40 CFR § 268.7(a)(1). 40 CFR § 268.7(a) requires the generator to test his waste or an extract developed using the test method described in Appendix I of Part 268, or using knowledge of the waste to determine if the waste is restricted from land disposal.

The following wastes are "restricted wastes" and banned from land disposal effective November 8, 1986: EPA Hazardous Waste Nos. F001, F002, F003, F004 and F005, unless one or more of the following conditions apply: (1) the generator of the solvent waste is a small quantity generator; (2) the solvent waste is generated from response action taken under CERCLA or corrective action taken under RCRA, or (3) the solvent waste is a solvent-water mixture, solvent-containing sludge or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of § 268.41. If a generator determines he is managing a restricted waste and the waste requires treatment prior to land disposal, for each shipment of such waste, the generator must notify the treatment facility in writing of the appropriate treatment standard. This notification must include the information to be provided below.

1. EPA Hazardous Waste Number _____

2. Waste Material Profile Number _____

3. Corresponding Treatment Standard _____

4. Manifest Number associated with this shipment of waste _____

5. Waste analysis data, where available (please attach)

Authorized Signature _____ Date _____

JAN 24 1990

5HR-12

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Lawrence Laska
Facility Representative
Chicago Bridge & Iron Company
1501 North Division Street
Plainfield, Illinois 60544

Re: Notice of Violation
Chicago Bridge & Iron Company
ILD 082 939 588

Dear Mr. Laska:

On December 19, 1989, the Illinois Environmental Protection Agency (IEPA), representing the U.S. Environmental Protection Agency, conducted a Resource Conservation and Recovery Act (RCRA) inspection of the above-referenced facility. The purpose of the inspection was to determine the facility's compliance with the applicable hazardous waste management requirements of RCRA, including the Federal land disposal restrictions. The Land Disposal Restrictions for F001-F005 spent solvents became effective on November 8, 1986, (40 CFR Part 268, and revisions to 40 CFR Parts 260-265 and 270-271) and for "California List" hazardous wastes on July 8, 1987, (reference 52 Federal Register 25760: revisions to 40 CFR Parts 262, 264, 268, and 270-271). Additionally, the land disposal restrictions for First Third of Scheduled Wastes became effective on August 8, 1988, (53 Federal Register 31138: revisions to 40 CFR Parts 264, 265, 266, 268, and 271), and for the Second Third of hazardous wastes on June 8, 1989 (40 CFR Part 268 and revisions to 40 CFR Parts 260-265 and 270-271).

With respect to the land disposal restrictions section of the inspection, your facility was found to be in violation of the following:

> Failure to provide a separate written notice attached to the manifest for each shipment of restricted wastes with the U.S. EPA hazardous waste numbers, the applicable treatment standards, manifests number, and waste analysis data, where available, as required by Section 268.7(a)(1);

A copy of the inspection report is enclosed for your records. please submit to this office, within thirty (30) days of receipt of this Notice of Violation, documentation demonstrating that the above cited violation has

been corrected and indicating what measures have been initiated to assure future compliance. Failure to correct the violations may subject the facility to further Federal enforcement action.

If you have any questions regarding this correspondence, please contact Ms. Barbara Russell of my staff at (312) 353-7922.

Sincerely yours,

Paul E. Dimock, Chief
IL/MI/WI Enforcement Program Section

Enclosure

cc: Harry Chappel, IEPA
Glenn Savage, IEPA

5HR-12:B.RUSSELL:ev:01/22/89:DISK#3:PC FILENAME:laska

EV 1-22-90

INIT.	BR 1/23/90	P.E.D.	
DATE		1-23-90	

B. Russell (5HR-12)

P 155 069 782

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Mr. Lawrence Laska	
Street and No. 1501 North Division Street	
P.O., State and ZIP Code Plainfield, Illinois 60544	
Postage	$ .85
Certified Fee	.85
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	.90
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$ 2.60
Postmark or Date	

PS Form 3800, June 1985

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.
1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)* 2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:
Mr. Lawrence Laska
Facility Representative
Chicago Bridge & Iron Co.
1501 North Division Street
Plainfield, Illinois 60544

4. Article Number
P 155 069 782

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X Ronald Edelski

6. Signature – Agent
X

7. Date of Delivery
1-26-90

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form **3811**, Mar. 1987 ★ U.S.G.P.O. 1987-178-268 **DOMESTIC RETURN RECEIPT**

12.19-89

OUT RUSSELL

RCRA LAND DISPOSAL RESTRICTION INSPECTION

Facility: CHICAGO BRIDGE & IRON Co. (CBI TECHNICAL SERVICES Co.-RESEARCH CENTER)

U.S. EPA I.D. No.: ILD082939588 1970800003

Street: 1501 NORTH DIVISION STREET

City: PLAINFIELD **State:** ILLINOIS **Zip Code:** 60544

Telephone: (815) 436-2912

Operator: CHICAGO BRIDGE & IRON TECHNICAL SERVICES RESEARCH CENTER

Street: 1501 NORTH DIVISION STREET

City: PLAINFIELD **State:** ILLINOIS **Zip Code:** 60544

Telephone: (815) 436-2912

Owner: CHICAGO BRIDGE & IRON INDUSTRIES

Street: 800 JORIE BOULEVARD

City: OAK BROOK **State:** ILLINOIS **Zip Code:** 60521

Telephone: (708) 654-7000

Inspection Date: 12/19/89 **Time:** 9:30am-11:45am **Weather Conditions:** 15° SNOWING

	Name	Affiliation	Telephone
Inspectors:	DONNA CZECH	IEPA	(708) 345-9780
Facility Representatives:	LAWRENCE LASKA		(815) 436-2912

	RCRA Status	F-Solvent	LDR Status California List	First Third
Generator	✓	✓		
Transporter				
Treater				
Storer				
Disposer				

RECEIVED
JAN 10 1990
IEPA/DLPC

Revised 9-26-88

IL 532-1739
LPC 296 11/88

INSPECTION SUMMARY

FOR FACILITY BACK GROUND, SEE RCRA NARRATIVE

LAND DISPOSAL RESTRICTION VIOLATIONS:

NO NOTIFICATION WAS SENT TO THE RECEIVING FACILITY FOR THE LAST TWO OFF-SITE SHIPMENTS OF LISTED F- SOLVENTS

1970800003 - Will County
Plainfield/Chicago Bridge & Iron Co.
ILD082939588

NARRATIVE

Chicago Bridge & Iron Co. (CBI) operates as a research center for CBI's manufacturing facilities which are located elsewhere. The subject site is currently operating under the name Chicago Bridge & Iron Technical Services Company Research Center. At this site CBI conducts research and development on the company's product line. Among the projects being conducted at CBI are: marine research, tests on structural steel and systems testing. There is no manufacturing or production occurring at this site.

Hazardous Wastes

1. Waste Flammable Liquids (D001)
   - from cleaning materials prior to testing
   - approximately 30 gallons are generated per month
   - shipped to EWR in Coal City, Illinois for fuel blending or incineration
   - a shipment is made when economically feasible
   - three drums were on site

2. Waste Solvents (F002, F003, F005)
   - from cleaning materials prior to testing
   - approximately 30 gallons are generated per month (total volume includes waste flammable liquids)
   - shipped to EWR in Coal City, Illinois for fuel blending or incineration
   - a shipment is made when economically feasible
   - two drums were on site

3. Waste Isocyanate (USEPA # not yet determined)
   - product material determined to be unusable
   - one-time generation
   - designated facility has not yet been determined
   - no recent shipments
   - three drums were on site

Non-Hazardous Wastes

1. Waste Oil
   - used hydraulic oil, cutting oils, etc.
   - less than one drum generated per month
   - designated facility has not yet been determined
   - no recent shipments
   - eleven drums were on site

2. Roofing Tar
   - from roofing work
   - one-time generation
   - designated facility has not yet been determined
   - no recent shipments
   - one drum was on site

3. Waste Ethylene Glycol
   - from testing; product determined to be unusable
   - one-time generation
   - designated facility has not yet been determined
   - no recent shipments
   - seven drums were on site

4. Aluminum Roof Coating
   - from roofing work
   - one-time generation
   - designated facility has not yet been determined
   - no recent shipments
   - one drum was on site

Hazardous Waste Units

1. S01 - Container Storage Area
   - located outside in the southeast corner of the property
   - surrounded by a locked fence
   - concrete floor, part of which is enclosed by a dike
   - 28 drums of waste (hazardous and non-hazardous) were located in and around this fenced area

2. S02 - Storage Tank
   - 1,000-gallon above-ground steel tank
   - located outside in the container storage area
   - currently empty

Notes

A satellite accumulation area is located in the basement outside the machine shop. This area contained one drum of waste solvents and one drum of waste oil. When drums are filled, they are taken to the outside container storage area.

CBI generates small quantities of hazardous waste, mainly spent solvents and waste flammable liquids. These wastes are generated sporadically when it is determined that a drum of product is no longer usable. According to Mr. Laska, the drums of hazardous waste which are currently located in and around the container storage area were only recently determined to be waste materials.

CBI had failed to submit Part 5 (the green copy) of two Illinois manifests to the Agency (#IL1771516 and #IL1771517). These copies were received from Mr. Laska during the inspection in exchange for a receipt. The copies are attached, resolving an apparent violation of Section 722.123(a).

The generator annual reports submitted by CBI indicate that no hazardous waste was shipped off-site in 1987 or in 1988. Waste isocyanate resulted from a one-time generation and does not appear on the most recent annual reports.

According to the facility annual reports filed by CBI, storage in containers has not occurred at this site since 1986. Likewise, the storage tank has not been used for several years. CBI is currently operating as a generator only and plans to close its regulated units rather than apply for a Part B permit.

Apparent Violations

722.134(a)(725.152(e)) - List of emergency equipment in the contingency plan is incomplete.

DC:1b:02411

RCRA LAND DISPOSAL RESTRICTION INSPECTION

APPLICABILITY CHECKLIST

Does the facility handle the following wastes?

		Gen.	Treat	Store	Disp.	Trans.
A.	**F-Solvent Wastes**					
1.	F001	___	___	___	___	___
2.	F002	✓	___	___	___	___
3.	F003	✓	___	___	___	___
4.	F004	___	___	___	___	___
5.	F005	✓	___	___	___	___

Note: Use Appendix A to determine whether the facility is misclassifying any of its wastes.

B. **California List Wastes** NONE GENERATED

1. Liquid hazardous waste (including free liquids associated with any solid or sludge) that contains the following metals at concentrations greater than or equal to those specified

		Gen.	Treat	Store	Disp.	Trans.
Arsenic	500 mg/L	___	___	___	___	___
Cadmium	100 mg/L	___	___	___	___	___
Chromium VI	500 mg/L	___	___	___	___	___
Lead	500 mg/L	___	___	___	___	___
Mercury	20 mg/L	___	___	___	___	___
Nickel	134 mg/L	___	___	___	___	___
Selenium	100 mg/L	___	___	___	___	___
Thallium	130 mg/L	___	___	___	___	___

2. Liquid hazardous waste (including free liquids associated with any solid or sludge) that contains free cyanides at concentrations greater than or equal to 1,000 mg/L

Gen.	Treat	Store	Disp.	Trans.
____	____	____	____	____

3. Liquid hazardous waste that has a pH of less than or equal to 2.0

____	____	____	____	____

4. Liquid hazardous waste that contains PCBs at concentrations greater than or equal to

50 ppm	____	____	____	____	____
500 ppm	____	____	____	____	____

Does the facility mix liquid hazardous waste that contains PCBs with other types of wastes?

____ Yes ____ No ____ NA

If yes, state reasons for mixing:

_____

_____

5. Hazardous waste that contains HOCs greater than or equal to 1,000 mg/L (liquids) or 1,000 mg/kg (solids)

____	____	____	____	____

Note (1): The prohibitions of 268.32(a)(3) and (e) do not apply if the waste is also subject to the solvent restrictions of 268 Subpart C for a specific HOC.

Note (2): The effective date of regulation for liquid wastes with HOCs greater than or equal to 1,000 mg/L and less than 10,000 mg/L was July 8, 1987; the effective date for liquid wastes containing HOCs greater than or equal to 10,000 mg/L and solid wastes containing HOCs greater than 1,000 mg/kg is November 8, 1988.

C. **First Third Wastes** NONE GENERATED

Note: (1) The detailed description for waste codes are listed in Appendix C.
(2) EPA has promulgated the treatment standards for the following waste code with *.

	Gen.	Treat	Store	Disp.	Trans.
F006*					
F007					
F008					
F009					
F019					
K001*					
K004*					
K008*					
K011					
K013					
K014					
K015*					
K016*					
K017					
K018*					
K019*					
K020*					
K021*					
K022*					
K024*					
K025*					
K030*					
K031					
K035					
K036*					
K037*					
K044*					
K045*					
K046*					

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. **BDAT Treatability Group - Treatment Standards Identification**

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

   ✓ Yes ____ No ____ NA

   If yes, check the appropriate treatability group.

   ____ Wastewaters containing solvents (less than or equal to 1% TOC by weight)
   ____ Pharmaceutical wastewater containing spent methylene chloride
   ✓ All other spent solvent wastes

2. California List Wastes: Does the generator correctly determine the appropriate treatment standard of the waste? NONE GENERATED

   a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

      ____ Yes ____ No ____ NA

      If yes, specify the method: _____

   b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated or disposed of by other approved alternate methods (40 CFR 761. 60 (e))?

      ____ Yes ____ No ____ NA

      If yes, specify the method and state whether the facility has submitted a written request to the Regional Administrator or Assistant Administrator for an exemption from the incineration requirement:

      _____
      _____
      _____

3. First Third Wastes: Does the generator correctly determine the appropriate treatability group of the waste? NONE GENERATED

____ Yes ____ No ____ NA

If yes, check the appropriate treatability group.

____ Wastewater (less than 1% TOC by weight and less than 1% filterable solids)
____ Nonwastewaters

List the waste code and check the correct treatment standard group.

Waste Code	Wastewater	Nonwastewater

B. Waste Analysis

1. F-Solvent Wastes

a. Does the generator determine whether the F-solvent waste exceeds treatment standards?

✓ Yes ____ No ____ NA

How was this determination made?

- Knowledge of waste

✓ Yes ____ No

If yes, is any supporting data available for review? Describe how this is adequate. LISTED SOLVENTS ARE USED FOR CLEANING PURPOSES, RESULTING IN SPENT SOLVENTS.

- TCLP

____ Yes ✓ No

If yes, provide the date of last test, the frequency of testing, and note any problems. Attach test results.

b. Does the F-solvent waste exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

✓ Yes ____ No ____ NA

If yes, specify the waste stream: F002, F003, F004

c. Does the generator dilute the F-solvent waste as a substitute for adequate treatment [268.3]?

____ Yes ✓ No ____ NA

d. How does the generator test F-solvent waste when a process or waste stream changes?
SPENT SOLVENTS ARE GENERATED FROM CLEANING - THIS PROCESS DOES NOT CHANGE

2. California List Wastes NONE GENERATED

a. Does the generator determine whether the waste is a liquid according to the Paint Filter Liquids Test (PFLT method 9095) as described by SW-846?

____ Yes ____ No ____ NA

b. If the waste is determined to be a liquid according to PFLT, is an absorbent added to the waste?

____ Yes ____ No ____ NA

What type of absorbent is used? _____
Check the types of waste to which absorbent is added.

____ Liquid hazardous waste having a pH less than or equal to 2

____ Liquid hazardous waste containing metals

____ Liquid hazardous waste containing free cyanides

c. Does the generator determine whether the concentration levels (not extract or filtrate) in the waste equal or exceed the prohibition levels or whether the waste has a pH of less than or equal to 2.0 based on:

- Knowledge of wastes

____ Yes ____ No ____ NA

If yes, is any supporting data available for review? Describe how this is adequate._____

- Testing

_____ Yes _____ No _____ NA

If yes, list test method used: _____

d. Does the generator determine if concentration levels in the PFLT filtrate exceed cyanide and metals concentration levels?

_____ Yes _____ No _____ NA

- If yes, list test method used and constituent and concentration levels that exceeded prohibition levels: _____

e. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

_____ Yes _____ No _____ NA

3. First Third Wastes: NONE GENERATED

a. Does the generator correctly determine the appropriate treatment standard of the waste?

_____ Yes _____ No _____ NA

Note: The treatment standards for first third wastes are given in Appendix D.

b. Does the generator determine whether the First Third waste exceeds treatment standards upon generation?

_____ Yes _____ No _____ Soft hammer

If yes, specify the waste stream: _____

How was this determination made?

- Knowledge of waste

_____ Yes _____ No

If yes, is any supporting data available for review? Describe how this is adequate._____

- TCLP

_____ Yes _____ No _____ NA

- Total Constituent Analysis

_____ Yes _____ No _____ NA

Provide the date of last test, the frequency of testing, and note any problems. Attach test results.

_____

_____

c. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

_____ Yes _____ No _____ NA

d. How does the generator test the waste when a process or waste stream changes?

_____

_____

_____

C. <u>Management</u>

1. On-Site Management

Is restricted waste or waste that exceeds the treatment standards treated, stored, or disposed on-site?

_____ Yes ___✓___ No

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

___✓___ Yes _____ No

b. Does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

_____ Yes ___✓___ No

THE LAST TWO SHIPMENTS WERE SENT WITHOUT NOTIFICATIONS

c. Does notification contain the following?

NOTIFICATIONS NOT SENT

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No

Identify off-site treatment or storage facilities: EWR in COAL CITY, ILLINOIS

d. Does the generator ship any waste that meets the treatment standards to an off-site disposal facility?

____ Yes ✓ No

e. Does the generator provide notification and certification to the disposal facility [268.7(a)(2)]?

____ Yes ____ No

f. Does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets treatment standards	____ Yes	____ No

Identify off-site land disposal facilities: _____

g. Is the waste subject to a nationwide variance, case by case extension (268.5), or petition (268.6)?

____ Yes ✓ No ____ NA

h. If yes, does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal [268.7(a)(3)]?

____ Yes ____ No

i. If yes, does the notification contain the following information?

EPA Hazardous waste number	____ Yes	____ No
The corresponding treatment standards and all applicable prohibitions	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Date the waste is subject to the prohibitions	____ Yes	____ No

j. Does the generator retain copies of all notices and certifications for a period of 5 years?

____ Yes ____ No

D. <u>Demonstration and Certification -- "Soft Hammer" Wastes</u> NONE GENERATED

a. Has the generator attempted to locate and contract with treatment and recovery facilities that provide treatment that yields the greatest environmental benefit [268.8(a)(1)]?

____ Yes ____ No

b. Has the generator submitted to the Regional Adminstration a demonstration and certification containing the following information to document its efforts to locate practically available treatment:

A list of facilities and facility officials contacted?	____ Yes	____ No
Addresses	____ Yes	____ No
Telephone Numbers	____ Yes	____ No
Contact dates	____ Yes	____ No

Attach a copy of the demonstration and certification

c. If the generator has determined that there is no practically available treatment for its wastes, has it sent documentation to EPA demonstrating why it was not able to obtain treatment or recovery for the waste?

____ Yes ____ No

If yes, attach a copy of written discussion.

d. Does the generator ship his waste off-site for treatment?

_____ Yes _____ No

Describe the type of treatment and treatment facilities _____

e. Did the generator send a copy of its demonstration and certification to the receiving facility with the first shipment of waste?

_____ Yes _____ No

f. Does the generator provide certification with each subsequent shipment of wastes?

_____ Yes _____ No

g. Does the generator provide the following notification to the receiving facility with each shipment of waste?

(i) EPA Hazardous waste number _____ Yes _____ No

(ii) Manifest number _____ Yes _____ No

(iii) Waste analysis data, if available _____ Yes _____ No

h. Does the generator retain copies of all notices, demonstrations, and certifications for a period of 5 years?

_____ Yes _____ No

E. <u>Treatment Using RCRA 264/265 Exempt Units or Processes</u>
(i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)

Are treatment residuals generated from units or processes exempt under RCRA 264/265?

_____ Yes ___✓___ No

If yes, list types of waste treatment units and processes:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

22 APR 1988

5HS-12

Mr. Lawrence Laska
Chicago Bridge & Iron Co.
(CBI Research Corporation)
1501 North Division Street
Plainfield, Illinois 60544

Re: Chicago Bridge & Iron Co.
ILD 082 939 588

Dear Mr. Laska:

The United States Environmental Protection Agency has reviewed the information which you submitted to this office on April 6, 1988. The stated actions appear to adequately address the land disposal restrictions deficiencies outlined in our March 10, 1988, Notice of Violation.

Your cooperation and efforts in this matter are appreciated. Should you have further questions, please feel free to contact Ms. Zetta Thomas of my staff at (312) 886-4581.

Sincerely yours,

Paul E. Dimock, Chief
IL/MI/WI Enforcement Program Section

cc: Glenn Savage, IEPA, FOS
Harry Chappel, IEPA, CMS

5HS-12:ZTHOMAS:4/18/88:ev DISK #3

CONCURRENCES								
SYMBOL								
SURNAME	E.V.			PED				
DATE	4-18-88	4/21/88		4.21.88				

EPA Form 1320-1 (12-70) OFFICIAL FILE COPY

*U.S. GPO : 1984-436-836

CBI Research Corporation
1501 North Division Street
Plainfield, Illinois 60544-8929
815 436 2912
FAX: 815-436-8345

April 6, 1988

Zetta Thomas
United States Environmental Protection Agency
Region 5
230 South Dearborn Street
Chicago, Illinois 60604

Attn: 5HS-12

Re: Notice of Violation
Chicago Bridge and Iron Co.
ILD 082 939 588

Dear Ms. Thomas:

In reference to your Notice of Violation letter of March 10, 1988, our response and resolutions to Item 1 and 2 are attached.

If you have any further questions, please give me a call. Thank you.

Sincerely,

L. J. Laska

L. J. Laska
Director Research Services

paw

Attachments

ITEM 1

RCRA LAND DISPOSAL RESTRICTIONS

GENERATOR NOTIFICATION TO TREATMENT FACILITY WHERE RESTRICTED WASTE REQUIRES TREATMENT PRIOR TO LAND DISPOSAL

This Notification is submitted to Chemical Waste Management, Inc., in accordance with regulations effective November 8, 1986, to be promulgated at 40 CFR § 268.7(a)(1). 40 CFR § 268.7(a) requires the generator to test his waste or an extract developed using the test method described in Appendix I of Part 268, or using knowledge of the waste to determine if the waste is restricted from land disposal.

The following wastes are "restricted wastes" and banned from land disposal effective November 8, 1986: EPA Hazardous Waste Nos. F001, F002, F003, F004 and F005, unless one or more of the following conditions apply: (1) the generator of the solvent waste is a small quantity generator; (2) the solvent waste is generated from response action taken under CERCLA or corrective action taken under RCRA, or (3) the solvent waste is a solvent-water mixture, solvent-containing sludge or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001-F005 solvent constituents listed in Table CCWE of § 268.41. If a generator determines he is managing a restricted waste and the waste requires treatment prior to land disposal, for each shipment of such waste, the generator must notify the treatment facility in writing of the appropriate treatment standard. This notification must include the information to be provided below.

1. EPA Hazardous Waste Number F001, F002

2. CWM Waste Material Profile Number ASH 21-1244, ASH21-1331

3. Corresponding Treatment Standard CCWE TABLE, 111 TRICHLOROETHANE = 0.41 MG/L

4. Manifest Number associated with this shipment of waste IL 1120828

5. Waste analysis data, where available (please attach)

Authorized Signature Lawrence J. Kaska Date 11/19/86

ITEM 2

HAZARDOUS WASTE ANALYSIS PLAN

CBI Research Corporation generates a variety of waste materials which is ever changing due to the nature of research and development activities. A generic written analysis waste plan has been developed with Illinois 35 Ill. Adm. Code 725.113(b). This procedure complies with paragraph (a). This waste analysis plan also complies with 40 CFR Part 268 requirements in accordance with Section 265.13. The following areas are addressed in CBI Research Corporation's waste analysis plan.

A. The parameters for which each hazardous waste will be anlayzed.

B. Test methods which will be used to test for these parameters.

C. The sampling methods used to obtain a representative sample of waste to be anlayzed.

D. The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure the analysis is accurate and up to date.

A: ANALYTICAL PARAMETERS

CBI Research Corporation has the policy of disposing of all hazardous waste by means of incineration at an approved facility. Waste is not disposed of in hazardous waste landfills.

All analyses required for waste disposal is performed by certified laboratories subcontracted by CBI Research Corporation. The laboratories are state and federally approved to perform waste analysis. All wastes are analyzed for the following to meet the requirements for incineration criteria:

Total Barium	Total Mercury
Total Cadmium	%Chlorine
Total Chromium	Color
Total Copper	Layers
Total Lead	Odor
Total Nickel	Physical Characteristics
Total Silver	Free Liquids
Total Zinc	Flash Point
Total Arsenic	pH
Total Selenium	Specific Gravity
Total Solids	Phenalics
Total Cyanide	Reactive Sulfide

B: ANALYTICAL TEST METHODS

The following is a listing of analytical methods utilized to perform parameter waste testing as listed in Section A of CBI Research Corporation's waste analysis plan.

1. Test Methods for Evaluating Solid Waste, Physical and Chemical Methods, EPA SW846

2. Annual Books of ASTM Standards

3. Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020

Individual Test Methods

Total Barium	EPA 1979 208.1, 208.2
Total Cadmium	EPA 1979 213.1, ASTM D-35TI-84 (A or B)
Total Chromium	EPA 1979 218.1, ASTM D-167084 (D)
Total Copper	EPA 1979 220.1, ASTM D-1688-84 (D or E)
Total Lead	EPA 1979 239.1, ASTM D-3599-85 (A or B)
Total Nickel	EPA 1979 249.1, ASTM D-1886-84 (C or D)
Total Silver	EPA 1979 272.1
Total Zinc	EPA 1979 289.1, ASTM D-1889081
Total Arsenic	EPA 1979 206.2, 206.3, ASTM D-2972-84 (A)
Total Selenium	EPA 1979 270.2
Total Mercury	EPA 1979 245.1, 245.2, ASTM D-3223-80
% Chlorine	EPA 1979 330.1 through 330.5, ASTM D-1253-76 (A & B)
Color	Visual
Layers	Visual
Odor	Smell
Physical Charac.	Paint Filter Test (March 22, 1982, Federal Register Notice)
Flash Point	Pensky-Martens Closed Cup, ASTM D-93-79
pH	USEPA SW-846
Specific Gravity	Standard Methods
Total Solids	Standard Methods
Total Cyanide	EPA 1979 335.1 TO 335.3, ASTM D-2036-82 (A & B)
Total Sulfide	EPA 1979 376.1, 376.2

C: SAMPLING METHODS

Hazardous wastes are stored in 55-gallon drums. Each drum is sampled by the following method.

Drum Sampling Procedure

Drums are to be opened using a bung wrench. The sampler then applies a clean pair of sample gloves. The sampler lowers a clean glass pipette or tube vertically through the liquid to the bottom of the drum. Holding the tube at the top of the tube, a thumb should be placed securely over the opening, forming an air-tight seal. The tube is then removed from the drum and the witness should visually inspect contents within the tube for layering, coloration, and record findings in the drum inspection log. The witness, wearing a clean pair of sample gloves, holds a sample container while the sampler carefully lifts thumb off the end of pipette or tube releasing the sample into the sample container. The sample container should be capped and the outside of the container wiped clean using paper towels or sorbents. The sample should be labelled immediately with date, time of sampling, drum number, and samplers. An indelible marker is used to write the drum identification number on another location on the container. This will serve as a backup in case the label is smudged or lost.

There is a hazardous waste storage tank located at the Plainfield facility. It has a capacity of 1,000 gallons. This tank is only used in the event that drum storage becomes excessive or that quantities of a single waste can be stored in bulk.

Sampling the tank will be accomplished in the following manner:

Step 1: Mechanically agitate tank contents to produce a homogenous mixture.

Step 2: Using a sampling tube (as described in Drum Sampling Procedure) with a representative sample.

Step 3: Place the sample in an approved glass container for laboratory analysis.

Step 4: Follow the same labelling and documentation as outlined for drum sampling.

D. ANALYTICAL TESTING FREQUENCY

All wastes will be sampled and analyzed at least once every 12 months. In addition to the 12-month sampling and analysis, wastes will be sampled and analyzed prior to disposal (incineration) to ensure that wastes meet state and federal guidelines for proper disposal. This minimum frequency will continue unless a process change occurs or EPA requires a different frequency.

Z. Thomas (5HS-12) 230 S. Dearborn, Chicago, IL 60604

P 759 199 422

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Mr. Lawrence Laska	
Street and No. 1501 N. Division	
P.O., State and ZIP Code Plainfield, IL 60544	
Postage	$ .56
Certified Fee	.75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	.70
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$ 2.01
Postmark or Date	

PS Form 3800, June 1985

MAR 1 1988 CHIC., CO., IL

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.
1. ☒ Show to whom delivered, date, and addressee's address. *↑(Extra charge)↑*
2. ☐ Restricted Delivery *↑(Extra charge)↑*

3. Article Addressed to:

Mr. Lawrence Laska
Chicago Bridge & Iron Co.
(CBI Research Corporation)
1501 N. Division
Plainfield, Illinois 60544

4. Article Number
P 759 199 422

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X

6. Signature — Agent
X

7. Date of Delivery
03-15-88

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form **3811**, Mar. 1987 ★ U.S.G.P.O. 1987-178-268 **DOMESTIC RETURN RECEIPT**

5HS-12

10 MAR 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Lawrence Laska
Chicago Bridge & Iron Co.
(CBI Research Corporation)
1501 N. Division
Plainfield, Illinois 60544

Re: Notice of Violation
Chicago Bridge & Iron Co.
ILD 082 939 588

Dear Mr. Laska:

On December 8, 1987, the Illinois Environmental Protection Agency (IEPA), representing the U.S. Environmental Protection Agency (U.S. EPA), conducted a Resource Conservation and Recovery Act (RCRA) inspection of the above-referenced facility. The purpose of the inspection was to determine the compliance status of your facility with respect to the applicable hazardous waste management requirements of RCRA, including the land disposal restrictions of certain spent solvents. The land disposal restrictions became effective on November 8, 1986, (reference 51 Federal Register 40636: 40 CFR Part 268, and revisions to 40 CFR Parts 260-265 and 270).

With respect to the land disposal requirements section of the inspection, your facility was found to be in violation of certain land disposal requirements as noted below:

1. Failure to notify in writing for each shipment of F-solvent wastes the applicable treatment standard, U.S. EPA hazardous waste number, manifest number, and waste analysis data, if available as required by Section 268.7(a)(1); and

2. Failure to revise the facility waste analysis plan to include 40 CFR Part 268 requirements in accordance with Section 265.13.

A copy of the inspection report is enclosed for your records. Please submit to this office, within thirty (30) days of receipt of this Notice of Violation, documentation demonstrating that the above-cited violations have been corrected and indicating what measures have been initiated to assure future compliance. Failure to correct the violations may subject the facility to further Federal enforcement action.

If you have any questions regarding this correspondence, please contact Ms. Zetta Thomas of my staff at (312) 886-4581.

Sincerely yours,

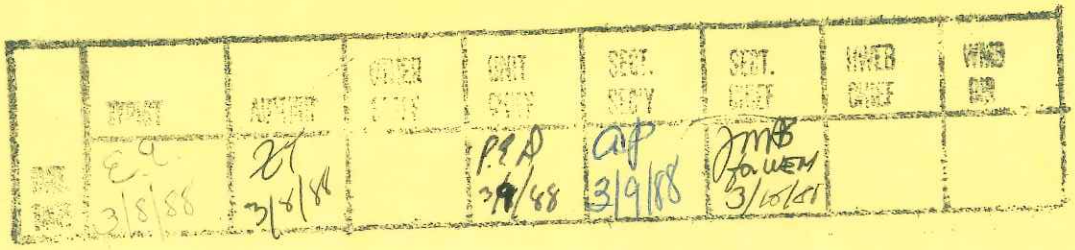
William E. Muno, Chief
RCRA Enforcement Branch

Enclosure

cc: Harry Chappel, IEPA
Glenn Savage, IEPA

bcc: Paul Dimock

5HE-12:ZTHOMAS:2/10/88:or: DISK #3 Document 10



P4186452-63

Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

217/782-6761

Refer to: # 1970800003 -- Will County
CBI Research Corp.
ILD 082939588
RCRA - Permits

May 6, 1988

CBI Research Corp.
1501 N. Division
Plainfield, Illinois 60544

Attn: Environmental Coordinator or
Plant Manager

Dear Sir:

According to Agency files, your facility currently manages hazardous waste in containers and/or tanks subject to the requirements of 35 IAC 700-725. 35 IAC 703.157(f) states that interim status for any hazardous waste storage or treatment facility will be terminated November 8, 1992, unless the facility submits Part B of the RCRA permit application for these units to this Agency by November 8, 1988. This letter is written to (1) make you aware of this requirement and (2) describe the actions which must be taken in response to this requirement.

According to 35 IAC 703.157(f), if an existing facility desires to (1) store hazardous waste on-site for greater than ninety (90) days, (2) treat hazardous waste, or (3) store hazardous waste as a commercial facility after November 8, 1992, it must submit Part B of the RCRA permit application to this Agency by November 8, 1988. The information which must be contained in this application is described in 35 IAC 703, Subpart D. The enclosed document, entitled "RCRA Permit Guidance" provides more detail regarding the necessary contents of the application and also identifies several guidance documents which will be useful in developing the application. Also included in this document is the form which must be used when submitting the application.

If a facility does not desire to continue storing and/or treating hazardous waste after November 8, 1992, it must close the storage and/or treatment unit(s) present at the facility prior to this date. Closure, in this instance, basically means that all contamination must be removed from the unit(s) and if necessary, from the area surrounding these units. The requirements which must be met in closing these units are contained in 35 IAC 725, Subpart G. For you convenience, guidance for the development of a closure plan is contained in the enclosed document entitled "Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities." PLEASE NOTE THAT A CLOSURE PLAN DOES NOT NEED TO BE SUBMITTED AT THIS TIME. IT MUST HOWEVER, BE SUBMITTED TO THE AGENCY NO LATER THAN MAY 8, 1992.

In some instances, there may be several interim status hazardous waste management units at a facility. The facility may desire to pursue a final RCRA permit for a portion of these units and close the rest of them. Because of the uncertainty associated with this option, all interim status units at a facility must be included in Part B of the RCRA permit application, unless a closure plan for the units being closed is submitted with the Part B. If a closure plan is submitted with the Part B, the application need only address those units which will remain in operation.

The only alternatives available for hazardous waste treatment and storage facilities to meet the requirements of 35 IAC 703.157(f) are (1) submit Part B of the RCRA permit application by November 8, 1988 or (2) close by November 8, 1992. However, some facilities may have previously filed Part A of the RCRA permit application in error and now feel that the hazardous waste management activities carried out at the facility do not require a RCRA permit (i.e. the Part A was filed for protective measures). If this is the case, the Agency requests that information supporting this position be submitted no later than November 8, 1988. The Agency can then review the information submitted and correct its records accordingly. The information which must be submitted to make this demonstration is contained in the enclosed document entitled "Facility Part A Withdrawal Request Form."

Finally, some facilities may have closed or are currently closing in accordance with an IEPA approved closure plan. (Please bear in mind this letter is going out to over 200 facilities; some closed facilities may inadvertently receive this letter.) In this instance, the Agency requests that a copy of (1) the closure plan approval letter and (2) the letter from the Agency accepting the certifications of the owner/operator and the rgistered professional engineer that closure was carried out in accordance with the approved closure plan (if closure has been completed) be submitted by November 8, 1988. The Agency will again be able to review this information and correct its records accordingly.

Because of the large number of facilities subject to the requirements of 35 IAC 703.157(f), the Agency requests that all facilities receiving this letter complete the enclosed form entitled "RCRA Permit Information Form." The form has been developed such that it can be used by a facility falling into any of the five categories described above (pursuing a final permit, planning to close, pursuing a permit for only a portion of the interim status units and closing the other units, protective filers, closed in accordance with an IEPA approved closure plan). This form must be submitted to the Agency no later than November 8, 1988, along with all required attachments. Failure to do so may subject a facility to enforcement under State and/or Federal regulations and possible monetary penalties up to $25,000 per day of noncompliance.

The RCRA Permit Information Form and all required attachments must be submitted in triplicate (original and two (2) copies) to the following address:

Permit Section, RCRA Unit
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

If you have any questions regarding this letter, please contact Jim Moore at 217/782-9875.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:JKM:dks/1238j/1244j/1-3

Enclosures

cc: Division File
Compliance
Maywood Region
USPEA Region V

ILLINOIS EPA
Environmental Protection Agency
1701 S. First Street Maywood, IL. 60153

312/345-9780

Refer to: 19708003 - Will County - Plainfield/Chicago Bridge & Iron
ILD082939588

March 29, 1982

Chicago Bridge & Iron Research Center
1501 No. Division Street
Plainfield, Illinois 60544-8929

Attn: Lawrence Laska

Dear Mr. Laska:

An inspection of the above facility was conducted by a representative of the Illinois Environmental Protection Agency (IEPA) on March 9, 1982. This inspection was conducted by the Illinois Environmental Protection Agency under a Cooperative Arrangement with, and authorization of, the United States Environmental Protection Agency (USEPA). A copy of the inspection report is enclosed. The purpose of the inspection was to determine your facility's compliance status with the Resource Conservation and Recovery Act (RCRA) of 1976, P.L. 94-580, as amended. We are pleased to report that your facility was found to be in compliance.

Your cooperation and efforts in this matter are appreciated. Should you have any questions about the report, please contact Charles J. Gruntman at the above number.

Sincerely,

Kenneth P. Bechely, Northern Region Manager
Field Operations Section
Division of Land/Noise Pollution Control

KPB:CJG:prb

Enclosure: Inspection Report

cc: Division File
Northern Region
U.S. E.P.A. - Region V

ENVIRONMENTAL PROTECTION AGENCY STATE OF ILLINOIS

L P C F C 0 5 5 (1)–(8) C (9)

ILD082939588

OBSERVATION REPORT - SITE INVENTORY NO. 19708003 (11)–(18)

Will CO. - L.P.C. Region # N Date 03/09/82 (20)–(25)

Plainfield (Location) / Chicago Bridge & Iron Research Center (Responsible Party)

Letter Sent (Yes or No) Yes (26)

Samples Taken: Yes ( ) No (✓) Time: From 01 : 20 P m

Ground Water( ) Surface( ) Other( ) To 02 : 35 P m

Weather 25°F Snow cover

Photos Taken: Yes ( ) No (✓) Interviewed Lawrence Laska

Inspector C J G (27)–(29)

Previous Inspection — Previous Correspondence — Site Open: Yes(✓) No( )

OPERATIONAL STATUS:		TYPE OF OPERATION:				AUTHORIZATION:	
Operating	(✓)	Landfill	( )	Storage	(✓)	E.P.A. Permit	( )
Temporarily Closed	( )	Random Dump	( )	Salvage	( )	Variance	( )
Closed Not Covered	( )	Other ________	( )	A.C.D.	( )	21(e)	( )
Closed and Covered	( )	Quantity Received Daily(1-6)	1 (30)			Board Order	( )
						Illegal (5)	( ) N/A (31)

IMPROVED

LPC 4 1/79 5,000

SAME

DETERIORATED I S or D S (62)

GENERAL REMARKS: Chicago Bridge and Iron Research Center appeared to be in general compliance at the time of the inspection. Because the facility is a research center, they listed on their "Part A" application hazardous wastes which the facility does not currently generate or store but may at some future time. Of the wastes presently stored at the facility, their mixed solvent wastes have been drained from their 1000 gal. storage tank to 55 gal drums in preparation for shipment to a disposal site. These drums and the drums containing

INTERVIEW: waste "A" and "B" components of polyurethane have "Hazardous Waste" labels and are loaded on pallets. The facility was planning to use hazardous waste manifests supplied by Labelmaster. I informed them that when the Agency grants a special waste disposal permit for their wastes their facility will receive Illinois manifests which they should use

DIAGRAM:

100%

17108003
STATE IDENTIFICATION NUMBER
(If Applicable)

ILD082939588
EPA IDENTIFICATION NUMBER

3-9-82

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS
TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form A - General Facility Standards

I. General Information:

(A) Facility Name: Chicago Bridge and Iron Research Center
(B) Street: 1501 North Division Street
(C) City: Plainfield (D) State: Illinois (E) Zip Code: 60544
(F) Phone: 815/436-2912 (G) County: Will

(H) Operator: Chicago Bridge and Iron Company
(I) Street: 1501 N. Division St.
(J) City: Plainfield (K) State: IL. (L) Zip Code 60544
(M) Phone: _____ (N) County: Will

(O) Owner: Chicago Bridge and Iron Company
(P) Street: 1501 N. Division St.
(Q) City: Plainfield (R) State: IL. (S) Zip Code: 60544
(T) Phone: _____ (U) County: Will
(V) Date of Inspection: March 9, 1982 (W) Time of Inspection (From) 1:20 p (To) 2:35p

(X) Weather Conditions: 25°F - snow cover

Pages 12 - 18 and 21 - 23 are not applicable to this facility and have been removed from this report.

Rev. 3-6-81/J.B.

(Y) Person(s) Interviewed	Title	Telephone
WILLIAM WELCH	RESEARCH TECHNICIAN	815/436-2912
LAWRENCE LASKA	MANAGER	"

(Z) Inspection Participants	Agency/Title	Telephone
CHARLES J. GRUNTMAN	IEPA / DLPC / EPE	312/345-9780
JEFF STOFFERAHN	IEPA / DLPC / EPS	"

(AA) Preparer Information

Name	Agency/Title	Telephone
CHARLES J. GRUNTMAN	IEPA/DLPC/EPE	"

II. SITE ACTIVITY:

Complete sections I through VII for all treatment, storage, and/or disposal facilities. Complete the forms (in parenthesis) in section VIII corresponding to the site activities identified below:

✓ A. Storage and/or Treatment
- ✓ 1. Containers (I)
- ✓ 2. Tanks (J)
- 3. Surface Impoundments (K)
- 4. Waste Piles (L)

___ B. Land Treatment (M)

___ C. Landfills (N)

___ D. Incineration and/or Thermal Treatment (O and P)

___ E. Chemical, Physical, and Biological Treatment (Q)

Note: If facility is also a generator or transporter of hazardous waste complete sections IX and X of this form as appropriate.

III. GENERAL FACILITY STANDARDS: (Part 265 Subpart B)

	Yes	No	NI*	Remark
(A) Has the Regional Administrator been notified regarding:				
1. Receipt of hazardous waste from a foreign source?	—	—	N/A	No receipt of foreign waste
2. Facility expansion?	—	—	N/A	No facility expansion
(B) General Waste Analysis:				
1. Has the owner or operator obtained a detailed chemical and physical analysis of the waste?	✓	—	—	ARRO Labs, Inc. of Joliet, IL. conducted waste analysis.
2. Does the owner or operator have a detailed waste analysis plan on file at the facility?	✓	—	—	
3. Does the waste analysis plan specify procedures for inspection and analysis of each movement of hazardous waste from off-site?	—	—	N/A	Company does not receive waste.
(C) Security - Do security measures include: (if applicable)				
1. 24-Hour surveillance?	—	✓	—	
2. Artificial or natural barrier around facility?	✓	—	—	Double fence
3. Controlled entry?	✓	—	—	Locked gate
4. Danger sign(s) at entrance?	✓	—	—	
(D) Do Owner or Operator Inspections Include:				
1. Records of malfunctions?	✓	—	—	No malfunctions
2. Records of operator error?	✓	—	—	No operator errors
3. Records of discharges?	✓	—	—	No discharges

Not Inspected

	Yes	No	NI*	Remarks
4. Inspection schedule?	✓	---	---	----------
5. Safety, emergency equipment?	✓	---	---	----------
6. Security devices?	✓	---	---	----------
7. Operating and structural devices?	✓	---	---	----------
8. Inspection log?	✓	---	---	----------
(E) Do personnel training records include: (Effective 5/19/81)				
1. Job titles?	✓	---	---	----------
2. Job descriptions?	✓	---	---	----------
3. Description of training?	✓	---	---	----------
4. Records of training?	✓	---	---	----------
5. Have facility personnel received required training by 5-19-81?	✓	---	---	----------
6. Do new personnel receive required training within six months?	✓	---	---	----------
(F) If required are the following special requirements for ignitable, reactive, or incompatible wastes addressed?				
1. Special handling?	✓	---	---	----------
2. No smoking signs?	✓	---	---	----------
3. Separation and protection from ignition sources?	✓	---	---	----------

*Not Inspected

IV. PREPAREDNESS AND PREVENTION:
(Part 265 Subpart C)

	Yes	No	NI*	Remarks
(A) Maintenance and Operation of Facility: Is there any evidence of fire, explosion, or release of hazardous waste or hazardous waste constituent?		✓		
(B) If required, does the facility have the following equipment:				
1. Internal communications or alarm systems?	✓			telephone
2. Telephone or 2-way radios at the scene of operations?	✓			telephone
3. Portable fire extinguishers, fire control, spill control equipment and decontamination equipment?	✓			Dike around storage area. Fire extinguishers

Indicate the volume of water and/or foam available for fire control:

(C) Testing and Maintenance of Emergency Equipment:				
1. Has the owner or operator established testing and maintenance procedures for emergency equipment?	✓			
2. Is emergency equipment maintained in operable conditions?	✓			by outside service
(D) Has owner or operator provided immediate access to internal alarms? (if needed)	✓			telephone activates the alarm system

*Not Inspected

(E) Is there adequate aisle space for unobstructed movement? ✓

V. CONTINGENCY PLAN AND EMERGENCY PROCEDURES: (Part 265 Subpart D)

(A) Does the Contingency Plan contain the following information:	Yes	No	NI*	Remarks
1. The actions facility personnel must take to comply with §265.51 and 265.56 in response to fires, explosions, or any unplanned release of hazardous waste? (If the owner has a Spill Prevention, Control, and Countermeasures (SPCC) Plan, he needs only to amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part (as applicable.)	✓			
2. Arrangements agreed by local police departments, fire departments hospitals, contractors, and State and local emergency response teams to coordinate emergency services pursuant to §265.37?	✓			
3. Names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	✓			
4. A list of all emergency equipment at the facility which includes the location and physical description of each item on the list and a brief outline of its capabilities?	✓			
5. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary? (This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes?)	✓			

Not Inspected

	Yes	No	NI*	Remarks
(B) Are copies of the Contingency Plan available at site and local emergency organizations?	✓			
(C) Emergency Coordinator				
1. Is the facility Emergency Coordinator identified?	✓			
2. Is coordinator familiar with all aspects of site operation and emergency procedures?	✓			
3. Does the Emergency Coordinator have the authority to carry out the Contingency Plan?	✓			
(D) Emergency Procedures				
If an emergency situation has occurred at this facility, has the Emergency Coordinator followed the emergency procedures listed in 265.56?			N/A	NO EMERGENCIES HAVE OCCURRED.

VI. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING
(Part 265 Subpart E)

	Yes	No	NI*	Remarks
(A) Use of Manifest System				
1. Does the facility follow the procedures listed in §265.71 for processing each manifest?			N/A	FACILITY DOES NOT
2. Are records of past shipments retained for 3 years?				RECEIVE HAZARDOUS WASTE.
(B) Does the owner or operator meet requirements regarding manifest discrepancies?				

*Not Inspected

(C) Operating Record

1.	Does the owner or operator maintain an operating record as required in 265.73?	✓	—	—
2.	Does the operating record contain the following information:			
**b.	The method(s) and date(s) of each waste's treatment, storage, or disposal as required in Appendix I?	✓	—	—
c.	The location and quantity of each hazardous waste within the facility?	✓	—	—
***d.	A map or diagram of each cell or disposal area showing the location and quantity of each hazardous waste? (This information should be cross-referenced to specific manifest number, if waste was accompanied by a manifest.)	—	—	N/A
e.	Records and results of all waste analyses, trial tests, monitoring data, and operator inspections?	✓	—	—
f.	Reports detailing all incidents that required implementation of the Contingency Plan?	✓	—	—
g.	All closure and post closure costs as applicable? (Effective 5-19-81)	✓	—	—

** See page 33252 of the May 19, 1980, Federal Register.

*** Only applies to disposal facilities

*Not Inspected

VII. CLOSURE AND POST CLOSURE
(Part 265 Subpart G)

	Yes	No	NI*	Remarks
(A) Closure and Post Closure				
1. Is the facility closure plan available for inspection by May 19, 1981?	✓			
2. Has this plan been submitted to the Regional Administrator			N/A	facility is not closing
3. Has closure begun?			N/A	in the next 180 days
4. Is closure estimate available by May 19, 1981?	✓			
(B) Post closure care and use of property				
Has the owner or operator supplied a post closure monitoring plan? (effective by May 19, 1981)			N/A	

VIII. FACILITY STANDARDS
(Part 265, Subparts I thru R)

I
USE AND MANAGEMENT OF CONTAINERS

Facility Name: Chicago Bridge and Iron Research Center Date of Inspection: March 9, 1982

	Yes	No	NI*	Remarks
1. Are containers in good condition?	✓			
2. Are containers compatible with waste in them?	✓			
3. Are containers stored closed?	✓			
4. Are containers managed to prevent leaks?	✓			
5. Are containers inspected weekly for leaks and defects?	✓			Daily inspections
6. Are ignitable & reactive wastes stored at least 15 meters (50 feet) from the facility property line? (Indicate if waste is ignitable or reactive.)	✓			Waste storage area is over 300' from the property line.

	Yes	No	NI*	Remarks
7. Are incompatible wastes stored in separate containers? (If not, the provisions of 40 CFR 265.17(b) apply.)	---	---	N/A	No incompatible wastes
8. Are containers of incompatible waste separated or protected from each other by physical barriers or sufficient distance?	---	---	N/A	No incompatible waste

J
TANKS

Facility Name: Chicago Bridge and Iron Date of Inspection: March 9, 1982

	Yes	No	NI*	Remarks
1. Are tanks used to store only those wastes which will not cause corrosion, leakage or premature failure of the tank?	✓	---	---	---
2. Do uncovered tanks have at least 60 cm (2 feet) of freeboard, or dikes or other containement structures?	---	---	N/A	No uncovered tanks
3. Do continuous feed systems have a waste-feed cutoff?	---	---	N/A	tank not continuous feed.
4. Are waste analyses done before the tanks are used to store a substantially different waste than before?	---	---	N/A	Same type of waste is always stored in tank.
5. Are required daily and weekly inspections done?	✓	---	---	Daily inspections
6. Are reactive & ignitable wastes in tanks protected or rendered non-reactive or non-ignitable? Indicate if waste is ignitable or reactive. (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)	✓	---	---	---
7. Are incompatible wastes stored in separate tanks? (If not, the provisions of 40 CFR 265.17(b) apply.)	---	---	N/A	No incompatible wastes

*Not Inspected

	Yes	No	NI*	Remarks

8. Has the owner or operator observed the National Fire Protection Association's buffer zone requirements for tanks containing ignitable or reactive wastes?

   Tank capacity: 1000 gallons

   Tank diameter: 4 feet

   Distance of tank from property line ≈ 300 feet

   (See table 2 - 1 through 2 - 6 of NFPA's "Flammable and Combustible Liquids Code - 1977" to determine compliance.)

K
SURFACE IMPOUNDMENTS

Facility Name: _____ Date of Inspection: _____

	Yes	No	NI*	Remarks
1. Do surface impoundments have at least 60 cm (2 feet) of freeboard?				N/A
2. Do earthen dikes have protective covers?				
3. Are waste analyses done when the impoundment is used to store a substantially different waste than before?				
4. Is the freeboard level inspected at least daily?				
5. Are the dikes inspected weekly for evidence of leaks or deterioration?				
6. Are reactive & ignitable wastes rendered non-reactive or non-ignitable before storage in a surface impoundment? (If waste is rendered non-reactive or non-ignitable, see treatment requirements.)				
7. Are incompatible wastes stored in different impoundments? (If not, the provisions of 40 CFR 265.17(b) apply.)				

	Yes	No	NI*	Remarks
3. Has the owner or operator addressed the waste analysis requirements of 265.402?	___	___	___	_____
4. Are inspection procedures followed according to 265.403?	___	___	___	_____
5. Are the special requirements fulfilled for ignitable or reactive wastes?	___	___	___	_____
6. Are incompatible wastes treated? (If yes, 265.17(b) applies.)	___	___	___	_____

Note: EPA has temporarily suspended the applicability of the requirements of the hazardous waste regulations in 40 CFR Parts 122, 264 and 265 to owners and operators of (1) wastewater treatment tanks that receive, store, and treat wastewaters that are hazardous waste or that generate, store or treat a wastewater treatment sludge which is a hazardous waste where such wastewaters are subject to regulation under Sections 402 or 307(b) of the Clean Water Act (33 U.S.C. 1251 et seq.) and (2) neutralization tanks, transport vehicles, vessels, or containers which neutralize wastes which are hazardous only because they exhibit the corrosivity characteristic under 40 CFR §261.22, or are listed as hazardous wastes in Subpart D of 40 CFR Part 261 only for this reason.

IX

Complete this section if the owner or operator of a TSD facility also generates hazardous waste that is subsequently shipped off-site for treatment, storage, or disposal.

Facility has not shipped off-site, yet.

1. MANIFEST REQUIREMENTS

	Yes	No	NI*	Remarks
(A) Does the operator have copies of the manifest available for review?	___	___	N/A	_____
(B) Do the manifest forms reviewed contain the following information: (If possible, make copies of, or record information from, manifest(s) that do not contain the critical elements)				
1. Manifest document number?	___	___	___	_____
2. Name, mailing address, telephone number, and EPA ID Number of Generator	___	___	___	_____

	Yes	No	NI*	Remarks
3. Name and EPA ID Number of Transporter(s)?			N/A	
4. Name, address, and EPA ID Number of Designated permitted facility and alternate facility?				
5. The description of the waste(s) (DOT shipping name, DOT hazard class, DOT identification number)?				
6. The total quantity of waste(s) and the type and number of containers loaded?				
7. Required certification?				
8. Required signatures?				
(C) Does the owner or operator submit exception reports when needed?				

2. PRE-TRANSPORT REQUIREMENTS

(A) Is waste packaged in accordance with DOT Regulations? (Required prior to movement of hazardous waste off-site)			N/A	
(B) Are waste packages marked and labeled in accordance with DOT regulations concerning hazardous waste materials? (Required to movement of hazardous waste off-site)				
(C) If required, are placards available to transporters of hazardous waste?				

REMARKS

Use this section to briefly describe site activities observed at the time of the inspection. Note any possible violations of Interim Status Standards.

Chicago Bridge and Iron Research Center conducts research and development relating to the design, fabrication and construction of large metal plate products and structures.

The facility generates and stores hazardous wastes. The " Part A" submitted by the facility listed all of the hazardous wastes that they generate and store or may generate and store in the future. Also included in the "Part A" was a list of the chemicals that are used or may be used in the future that could be part of their hazardous wastes.

At the time of the inspection, the hazardous wastes in storage at the facility were mixed solvent wastes and "A" and "B" components of polyurethane that the facility would no longer be using. The mixed solvents are accumulated in a 1000 gal. storage tank but are loaded into 55 gal. drums prior to shipment for disposal. The "A" and "B" components of polyurethane are stored separately in drums.

The facility is preparing to ship their hazardous wastes to a disposal site in the near future (the first such shipment in approximately six years according to Lawrence Laska, the Manager of Reseach Services). The two disposal sites that the facility is considering are ESL in Joliet, Illinois and Chemical Waste Management in Alabama.

The inspection revealed that Chicago Bridge and Iron Research Center is in general complaince with all of the RCRA requirements for interim status.

D. Corrective Action

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

January 25, 1993

Mr. Douglas Hansen
CBI Industries, Inc.
1501 N. Division Street
Plainfield, Illinois 60544

Re: Visual Site Inspection
CBI Industries, Inc.
Plainfield, IL
ID No. ILD 082 939 588

Dear Mr. Hansen:

As indicated in the letter of introduction sent to you on February 25, 1992, the U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

Francene M. Harris

Kevin M. Pierard, Chief
Minnesota/Ohio Technical Enforcement Section
RCRA Enforcement Branch

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

CBI RESEARCH CORPORATION PLAINFIELD, ILLINOIS ILD 082 939 588

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460

Work Assignment No.	:	R05032
EPA Region	:	5
Site No.	:	ILD 082 939 588
Date Prepared	:	December 8, 1992
Contract No.	:	68-W9-0006
PRC No.	:	309-R05032-IL39
Prepared by	:	Resource Applications, Inc. (Peter McLaughlin)
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

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B VISUAL SITE INSPECTION FIELD NOTES

C FACILITY'S RCRA PART A PERMIT APPLICATION

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EXECUTIVE SUMMARY

Resource Applications, Inc. (RAI) performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the CBI Research Corporation (CBI Research) facility in Plainfield, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs identified.

The CBI Research facility performs research and development (R & D) projects for the parent company, Chicago Bridge & Iron Company (Chicago Bridge & Iron). No manufacturing processes are conducted at the facility. Numerous RCRA-listed wastes were, are, and may be generated during R & D activities. Hazardous wastes, such as waste degreasers (F002), waste paint (F003, F005), waste paint-related materials (F003, F005), and spent solvent (F003); and nonhazardous waste oils and spent coolants are generated in small quantities during R & D activities. These wastes are accumulated in the Hazardous Waste Accumulation Area (SWMU 1) located in the basement near the machining area. Once full, the unit is taken to the Hazardous Waste Storage Pad (SWMU 2) for less than 90-day storage; however, according to the facility representative this unit has not been filled since it began operation in 1986. In the past, hazardous wastes generated during R & D activities were placed in the Hazardous Waste Storage Tank (SWMU 3). When the tank was full, the hazardous waste was pumped into 55-gallon steel drums which were then stored at SWMU 2 in preparation for off-site disposal. The facility also generated a number of characteristic "D" wastes, "P" wastes, and "U" wastes during inventory cleanouts. These wastes are lab-packed and stored at SWMU 2 prior to off-site disposal. In addition to the hazardous wastes, the facility has generated asbestos waste during an inspection of the cooling tower. An asbestos sludge was placed in a 70-gallon steel salvage drum and placed on a wooden pallet in the materials yard. This Asbestos Waste Storage Area (SWMU 4) will be emptied of all asbestos waste upon completion of an asbestos abatement project scheduled to begin in March 1992. This asbestos abatement project and the removal of all asbestos waste will be conducted by Universal Asbestos Removal (UAR) of Bridgeview, Illinois. UAR will dispose of the asbestos waste at ARF Landfill in Grayslake, Illinois.

The facility has operated at its current location since 1967. The facility occupies 130 acres in an industrial and agricultural area and employs about 80 people. The facility's regulatory status is

that of a small-quantity generator. The facility underwent a name change in 1985 from Chicago Bridge & Iron Company to CBI Research Corporation. The name change did not affect ownership or operations. Prior to the current owners, the facility was operated by Continental Can Company, Inc. (CCC). CCC constructed the current laboratory building in 1959 and operated the facility until 1963. The facility was dormant from 1963 to 1967 when Chicago Bridge & Iron Company began operations. Prior to 1959 the site was agricultural land.

The facility is planning to undergo RCRA closure for its Hazardous Waste Storage Pad (SWMU 2) and its Hazardous Waste Storage Tank (SWMU 3), which rests on SWMU 2. According to the facility representative, it is Chicago Bridge & Iron corporate policy to seek formal RCRA closure for all regulated waste management units no longer in use. Closure is being conducted since SWMU 3 has not been utilized since 1986. SWMU 2 is being closed because it contains SWMU 3. Soil sampling will be performed around the perimeter of SWMU 2. If contamination is detected above IEPA cleanup objectives and it becomes necessary to remove SWMU 2, a temporary hazardous waste storage area will be designated in an inactive paint spray booth in the basement of the laboratory building. SWMU 3 will be removed during closure.

The PA/VSI identified the following 4 SWMUs and one AOC at the facility:

Solid Waste Management Units

1. Hazardous Waste Satellite Accumulation Area
2. Hazardous Waste Storage Pad
3. Hazardous Waste Storage Tank
4. Asbestos Waste Storage Area

Area of Concern

1. Tank Farm

CBI Research is bordered on the north by agricultural land, on the west by Kerr Glass Company, on the south by agricultural land, and on the east by the DuPage River. Private residences are located on the east side of the DuPage River. Access to the facility is controlled by an 8-foot-high chain-link fence surrounding the facility.

The closest surface water body is the DuPage River, which is the eastern border of the facility. The DuPage River is used for recreational and commercial purposes. The closest wetlands area is approximately 0.5 mile east of the facility, at an abandoned strip mine area.

There is a low potential for release to ground water, surface water, and on-site soils from all SWMUs. There is a moderate potential for release to air from the Asbestos Waste Storage Area (SWMU 4). This is due to the fact that the drum containing the asbestos waste is stored uncovered, outdoors; therefore the asbestos waste may become airborne. All other SWMUs have a low potential for release to air.

There is a low potential for release to ground water, surface water, and air from the Tank Farm (AOC 1). AOC 1 has a moderate potential for release to on-site soils due to the age of the tanks and since the integrity of the tanks has not been evaluated.

RAI recommends that the facility manage its asbestos waste stored at SWMU 4, so as to minimize the potential for release to environmental media. RAI also recommends integrity testing of the Tank Farm (AOC 1) tanks and/or soil sampling of AOC 1 for evidence of release. RAI recommends no further action for all other SWMUs.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC) received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5. Resource Applications, Inc. (RAI), TES 9 team member, provided the necessary assistance to complete the PA/VSI activities for the CBI Research Corporation (CBI Research) facility.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all visible SWMUs, identifying evidence of releases, initially identifying potential sampling parameters and locations, if needed, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the CBI Research facility in Plainfield, Illinois. The PA was completed on March 2, 1992. RAI gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA) and from EPA Region 5 RCRA files. RAI also reviewed documents from the U.S. Department of Agriculture (USDA), U.S. Geological Survey (USGS), and the Federal Emergency Management Agency (FEMA). The VSI was conducted on March 3, 1992. It included interviews with a facility representative and a walk-through inspection of the facility. Four SWMUs and one AOC were identified at the facility.

The VSI is summarized and six inspection photographs are included in Attachment A. Field notes from the VSI are included in Attachment B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

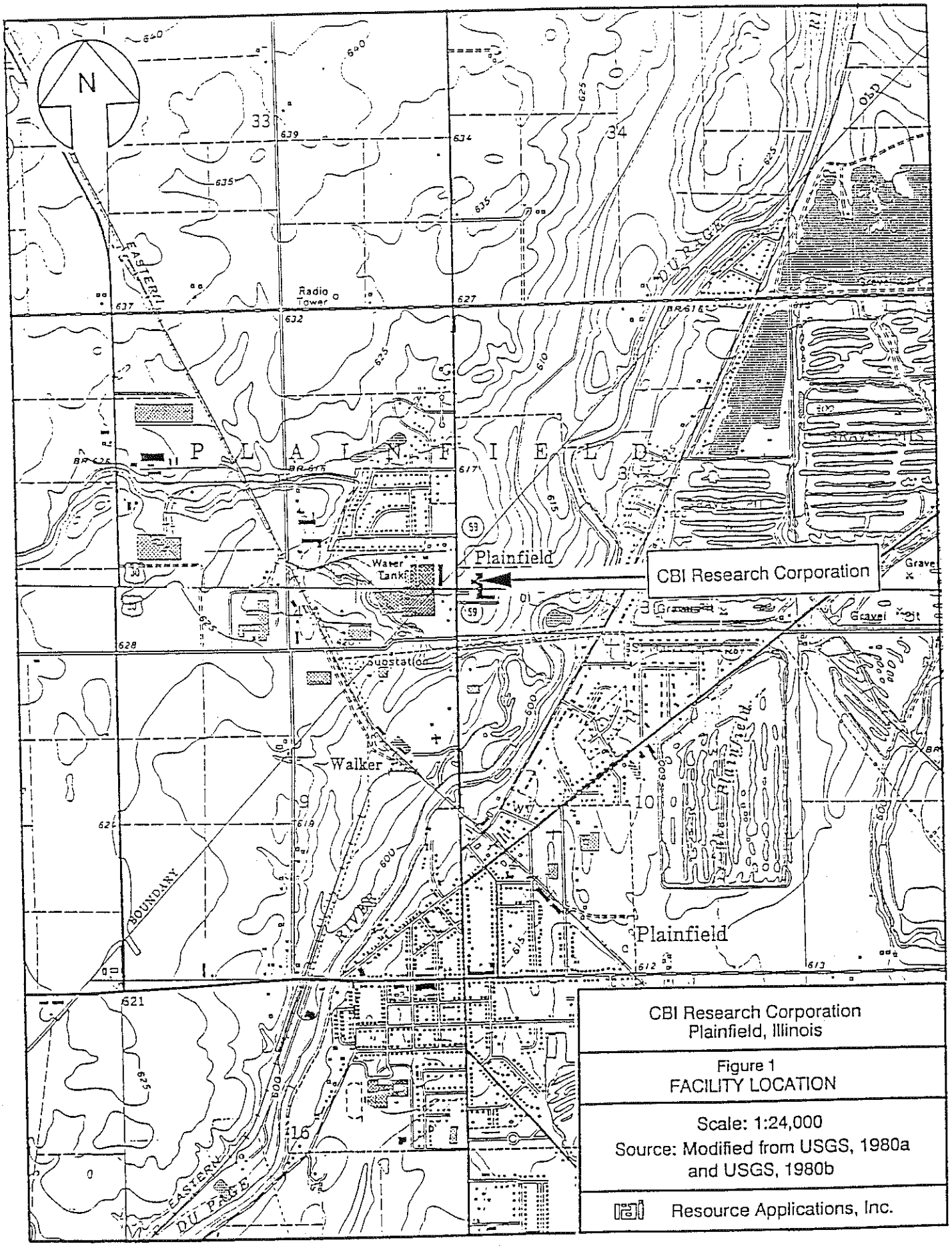
The CBI Research facility is located at 1501 N. Division Street in Plainfield, Will County, Illinois (latitude 41°37'25" N and longitude 88°12'07" W), as shown in Figure 1. The facility occupies 130 acres with the plant grounds occupying 10 acres. The facility is located in an agricultural and industrial area.

The CBI Research facility is bordered on the north by agricultural land, on the west by Kerr Glass Company, on the south by agricultural land, and on the east by the DuPage River. There are private residences on the east side of the DuPage River.

2.2 FACILITY OPERATIONS

The CBI Research facility performs research and development (R & D) projects for their parent company, Chicago Bridge & Iron Company (Chicago Bridge & Iron), which is a subsidiary of CBI Industries, Inc. The projects being conducted at the facility include: marine research, utilizing a large wave tank for testing scaled, off-shore structures; integrity tests on structural steel tanks and vessels; and systems testing. CBI Research also performs feasibility tests on independent projects. There is no manufacturing or production occurring at the facility.

Most chemical raw materials are stored in the inactive wet laboratory. These are in small amounts and stored in glass jugs and jars, and metal containers. Raw material solvents, oils, and coolants are stored in the basement machine shop and the maintenance department. Oils and coolants are stored in 55-gallon steel drums. Solvents, stored in 16-ounce spray cans, are used for cleaning tools and other equipment associated with the construction of test models. Large metal structures,



CBI Research Corporation
Plainfield, Illinois

Figure 1
FACILITY LOCATION

Scale: 1:24,000
Source: Modified from USGS, 1980a and USGS, 1980b

Resource Applications, Inc.

such as tanks and vessels, are stored outdoor in the materials yard. The facility also stores old raw materials in three staging areas.

The first staging area is the inactive spray paint booth (not in use since approximately 1981) located in the plant basement (see Photograph No. 1). Old raw material is kept in this area until it can be properly identified and its usefulness determined. If the material is found to be unusable it is managed as waste. This staging area is storing an assortment of materials including glues, paints, petroleum products, and cement mix.

The second staging area is located outdoors in the materials yard. This area has 14 55-gallon steel drums (some in over-packs), two 35-gallon steel drums, and four 70-gallon steel drums (see Photograph No. 2). All the drums are on wooden pallets above gravel covering. The material in this staging area was to be used for a discontinued research project for developing an orange juice concentrate system. According to the facility representative, this material may be ethylene glycol, liquid smoke, and/or orange juice. This material will be identified, and if found to be unusable, will be managed as waste.

The third staging area is a 20-foot long metal transport container located north of the second staging area (see Photograph No. 3). This staging area contains materials used in the construction of a structure erected by Chicago Bridge & Iron in the Persian Gulf during the early 1980s. According to the facility representative, the material is currently considered raw material and will be subject to the same usefulness determination as the materials in the other two staging areas. If found to be unusable, the materials will be managed as waste.

The facility has an aboveground Tank Farm (AOC 1) consisting of three tanks: one 18,500-gallon steel floating-roof tank, which stored petroleum products; one 11,500-gallon steel tank which stored ethylene glycol; and one 11,000-gallon concrete tank, which stored liquified natural gas (LNG). The petroleum product and LNG tanks have not been used since 1981. The ethylene glycol tank was emptied in 1990 and is no longer in use. The tank farm was used to perform emissions testing on floating-roof tanks. No releases from these tanks have been documented; however, neither integrity tests nor soil sampling have been performed for these tanks.

The facility has operated at its current location since 1967 and employs about 80 people. The facility underwent a name change in 1988 from Chicago Bridge & Iron to CBI Research Corporation (CBI Research, 1985). Facility activities were not affected. The facility consists of the 78,000-square-foot (sq.-ft.) laboratory building, the 1.25-million-gallon wave tank, the 37,000-sq.-ft. insulation research building, and the 2-acre materials storage yard. Currently the facility is constructing a new 75,000-sq.-ft. engineering building adjacent to the north side of the laboratory building. The facility has also constructed a retention pond west of the new engineering building to collect storm water runoff.

The facility building was constructed by Continental Can Company, Inc. (CCC) in 1959. CCC operated the facility as a glass research center from 1959 to 1963. The facility was dormant from 1963 to 1967 when Chicago Bridge & Iron began operations. Prior to 1959 the area was used as agricultural land.

Hazardous wastes, and nonhazardous waste oils and spent coolants generated during R & D activities are accumulated in a 55-gallon steel drum Hazardous Waste Satellite Accumulation Area (SWMU 1) in the basement near the machining area. When the drum is full, it is taken outdoors to the Hazardous Waste Storage Pad (SWMU 2). Formerly, the facility would store hazardous wastes in the Hazardous Waste Storage Tank (SWMU 3); however this tank has not been used since 1986. The facility also generates hazardous waste during inventory cleanouts. These wastes are lab-packed and stored at SWMU 2 prior to off-site disposal. Facility SWMUs are identified in Table 1. The facility layout, including SWMUs and AOC, is shown in Figure 2.

2.3 WASTE GENERATING PROCESSES

Hazardous wastes are generated at the CBI Research facility during R & D activities, and inventory cleanouts. However, types of hazardous wastes generated and rates of generation are not typical. In general terms, the primary waste streams generated at the facility in recent years are waste degreasers (F002), waste paint (F003, F005), waste paint-related material (F003, F005), spent solvent (F003), waste corrosives (D002, D003, D005), waste oxidizers (D001, D003, D007, D009), waste flammable liquids (D001, F003), waste poisons (D003, D005, D006, D009), and waste compressed gas (D001), as well as characteristic "P" wastes, and characteristic "U" wastes. The

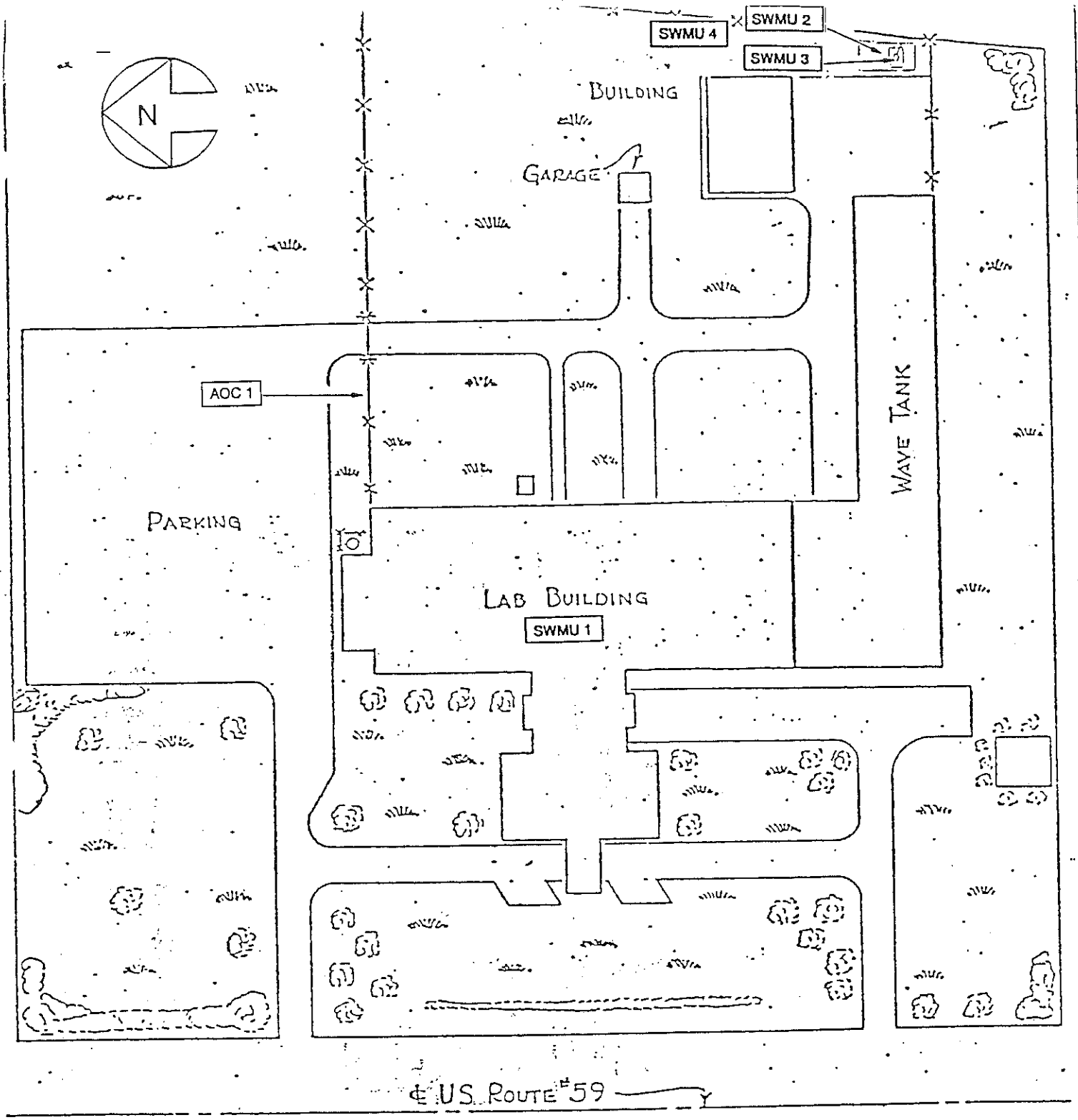
TABLE 1

SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Hazardous Waste Accumulation Area	No	Active; accumulating hazardous wastes.
2	Hazardous Waste Storage Pad	Yes	Active; storing hazardous wastes for less than 90 days; will undergo RCRA closure.
3	Hazardous Waste Storage Tank	Yes	Inactive; will undergo RCRA closure.
4	Asbestos Waste Storage Area	No	Active; storing asbestos waste.

Note:

* A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



Solid Waste Management Units (SWMU)

1. Hazardous Waste Satellite Accumulation Area
2. Hazardous Waste Storage Pad
3. Hazardous Waste Storage Tank
4. Asbestos Waste Storage Area

Area of Concern (AOC)

1. Tank Farm

CBI Research Corporation
Plainfield, Illinois

Figure 2
FACILITY LAYOUT/SWMU LOCATIONS

Scale: 1" = 100'
Source: Modified from CBI Research, 1988

Resource Applications, Inc.

facility also generates nonhazardous waste oils and spent coolants. Wastes generated at the facility, as well as the waste source and primary management unit are listed in Table 2.

During R & D activities various wastes are generated. Machine and tool cleaning generates waste degreasers (F002). Painting models and other equipment generate waste paints (F003, F005) and waste paint-related material (F003, F005), as well as spent solvent (F003). Nonhazardous waste oils and spent coolants from the machining area are also generated. As these wastes are generated, they are placed in a 55-gallon steel drum at the Hazardous Waste Satellite Accumulation Area (SWMU 1) located in the basement near the machining area. Most of the recent R & D work performed at CBI Research has not required much waste generation activity. SWMU 1 was installed in 1986 and has never been filled. Once full, this unit will be moved to the Hazardous Waste Storage Area (SWMU 2). Prior to the installation of SWMU 1, these R & D generated wastes were taken to the Hazardous Waste Storage Tank (SWMU 3). When necessary, the waste was pumped from SWMU 3 into 55-gallon steel drums and stored in SWMU 2. The waste was removed for incineration by SCA Chemical Services of Chicago, Illinois. The last time SWMU 3 was emptied was 1986, when seven 55-gallon steel drums were removed from the facility.

In recent years, most of the facility's waste generation has been from inventory cleanouts. Out-dated, off-specification, or obsolete material is identified and lab-packed for removal. In 1991, Safety-Kleen Corporation (Safety-Kleen) of Dolton, Illinois removed 275 gallons of waste paint-related material (F003, F005) from the facility. Safety-Kleen incinerated this waste. Also in 1991, the following wastes were lab-packed and removed by FIW, Inc. (FIW) of Pecatonica, Illinois: 190 gallons of waste corrosives (D002, D003, D005), 45 gallons of waste oxidizers (D001, D003, D007, D009), 390 gallons of waste flammable liquids (D001, F003), 25 gallons of waste poisons (D003, D005, D006, D009), and 5 gallons of waste compressed gas (D001). All of these hazardous wastes were incinerated at FIW.

The facility may also generate a number of characteristic "P" waste, and characteristic "U" wastes during inventory cleanouts or R & D activities. Typically, these waste are lab-packed or placed in 55-gallon steel drums and stored at SWMU 2 prior to off-site disposal. Hazardous wastes possibly generated at the facility are listed on the facility's revised RCRA Part A permit application which is included as Attachment C. In 1990, the facility emptied the ethylene glycol

TABLE 2

SOLID WASTES

Waste/EPA Waste Code	Source	Primary Management Unit*
Waste Degreasers/F002	Research and Development	1, 2, and 3
Waste Paints/F003, F005	Research and Development	1, 2, and 3
Waste Paint-Related Material/ F003, F005	Research and Development, and Inventory Cleanouts	1, 2, and 3
Spent Solvent/F003	Research and Development	1, 2, and 3
Waste Corrosives/D002, D003, D005	Inventory Cleanouts	2
Waste Oxidizers/D001, D003, D007, D009	Inventory Cleanouts	2
Waste Flammable Liquids/D001, F003	Inventory Cleanouts	2
Waste Poisons/D003, D005, D006, D009	Inventory Cleanouts	2
Waste Compressed Gas/D001	Inventory Cleanouts	2
Characteristic "P" Wastes	Research and Development, and/or Inventory Cleanouts	2
Characteristic "U" Wastes	Research and Development, and/or Inventory Cleanouts	2
Waste Oil/NA**	Research and Development, and/or Inventory Cleanouts	1, 2, and 3

TABLE 2 (continued)

SOLID WASTES

Waste/EPA Waste Code	Source	Primary Management Unit*
Spent Coolant/NA**	Research and Development, and/or Inventory Cleanouts	1, 2, and 3
Asbestos/NA**	Cooling Tower Inspection	4
Ethylene Glycol/NA**	Research and Development, and Inventory Cleanouts	2

Notes:

* Primary management unit refers to a SWMU that currently manages or formerly managed the waste.

** Nonapplicable (NA) designates nonhazardous waste.

product tank located in the Tank Farm (AOC 1). Ethylene glycol had been used for emissions testing of floating-roof tanks. The ethylene glycol was deemed unusable and 385 gallons were removed by and taken to Effluent Technology, Inc. of McCook , Illinois. Effluent Technology, Inc. recycled the ethylene glycol.

Prior to 1990, while inspecting the cooling tower located on the roof of the laboratory building, facility maintenance personnel shovelled out a sludge-like substance suspected to contain asbestos and placed it in a 70-gallon steel salvage drum. This substance was analyzed by Universal Asbestos Removal (UAR) of Bridgeview, Illinois in 1992, and found to contain asbestos (CBI Research, 1992). This drum was placed on a wooden pallet at the Asbestos Waste Storage Area (SWMU 4) in the materials yard. According to the facility representative, UAR is to begin an asbestos abatement program in March 1992. UAR will remove asbestos from the laboratory building which will undergo remodelling. UAR will also remove any remaining asbestos from the cooling tower. When UAR removes all the asbestos waste from the facility, it will also remove the asbestos waste located at SWMU 4. All asbestos waste is scheduled to go to ARF Landfill in Grayslake, Illinois.

2.4 HISTORY OF DOCUMENTED RELEASES

No releases of hazardous wastes or hazardous constituents to ground water, surface water, air, or on-site soil have been documented at the facility.

2.5 REGULATORY HISTORY

Chicago Bridge & Iron submitted a notification of hazardous waste activity to EPA on August 11, 1980 (Chicago Bridge & Iron, 1980a). The facility submitted a RCRA Part A permit application on November 12, 1980 (Chicago Bridge & Iron, 1980b). This application listed the following process codes and capacities: S01 (drum storage) at 1,100 gallons, and S02 (tank storage) at 1,000 gallons. Due to the nature of the facility's activities, Chicago Bridge & Iron listed on the application all wastes that it did or may generate, as follows:

F001	U044	U165
F005	U112	U169
P018	U123	U188
P105	U134	U190
P106	U135	U196
U001	U140	U213
U002	U147	U219
U013	U151	U220
U019	U154	U223
U021	U159	U226
U029	U161	U239

CBI Research submitted a revised RCRA Part A permit application to EPA or February 17, 1988 (CBI Research, 1988). The revised Part A reflected the following changes:

- Facility name change from Chicago Bridge & Iron to CBI Research
- Facility address change from Route 59 to 1501 N. Division St. (physical location did not change)
- Description of activities to reflect name change
- EPA hazardous waste codes F002 and D001 were added
- Process code S02 was changed to S01.

The facility is currently preparing a closure plan for its Hazardous Waste Storage Pad (SWMU 2) and Hazardous Waste Storage Tank (SWMU 3). AWARE Environmental of Charlotte, North Carolina is assisting CBI Research in the closure activities. Closure is being conducted due to the reduced hazardous waste generating activities and the subsequent lack of need for SWMU 3. The closure plan will address the removal of SWMU 3, and if warranted, the removal of SWMU 2. Although neither unit stored hazardous wastes for greater than 90 days, a Chicago Bridge & Iron corporate policy requires formal RCRA closure of any waste management unit no longer in use. SWMU 2 is being closed because it contains SWMU 3. Soil sampling will be performed around the perimeter of SWMU 2. If contamination is detected above IEPA cleanup objectives, SWMU 2 will be removed. If SWMU 2 is to be removed, the facility will utilize the spray paint booth (see Photograph No. 1) as a temporary hazardous waste storage area. At the time of the VSI, no further progress had been made regarding the closure of these units. The facility currently operates as a small-quantity generator storing wastes for less than 90 days.

In the past, CBI Research has had some RCRA compliance problems. During an inspection on February 14, 1986, IEPA noted that the facility did not have records describing the type, quantity, and final disposition of the hazardous wastes generated on site (IEPA, 1986). These violations were resolved on February 19, 1986 (IEPA, 1986). During an inspection on December 8, 1987, IEPA noted numerous paperwork violations including missing or incorrect information on the facility's Part A permit application (IEPA, 1988a). The facility submitted several responses to these violations and was found to be in compliance on April 27, 1988 (IEPA, 1988b). The facility also received a notice of violation (NOV) as a result of the December 8, 1987 inspection from the EPA regarding violations of the land disposal requirements of F-solvent wastes (EPA, 1988a). The facility submitted a response to the NOV on April 6, 1988, and was subsequently found to be in compliance (EPA, 1988b). During an inspection on December 19, 1989, the facility was found to be violating the land disposal restrictions for failure to provide written notice attached to each waste manifest leaving the facility (EPA, 1990a). The facility responded to the NOV on January 31, 1990, and was subsequently found to be in compliance (EPA, 1990b).

The facility is not required to have operating air permits. The facility does not have a history of odor complaints from area residents. The facility is not required to have a National Pollutant Discharge Elimination System (NPDES) permit.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the CBI Research facility.

2.6.1 Climate

The site is situated in northern Will County, Illinois, about 6 miles north-northwest of Joliet. With no significant topographical barriers to airmass flow, the climate in the area is typically continental with cold winters; warm summers; and frequent short periodic fluctuations in the temperature, humidity, cloudiness and wind direction (Ruffner, 1985). The average daily temperature is 48.7°F. The lowest average daily minimum temperature of 11.3°F occurs in January. The highest average daily maximum temperature of 84.2°F occurs in July. The prevailing wind direction is west

and the average wind speed is 10.4 miles per hour. Average annual precipitation as water equivalent is 35.62 inches. Annual net precipitation is 5.6 inches (USDC, 1968). In winter about one half of the precipitation, or 10 percent of the annual total, falls as snow. During the fall, winter, and spring, the pattern of precipitation tends to be uniform over both time and distance, whereas in summer rainfall is often locally heavy and variable. The one-year, 24-hour maximum rainfall recorded in the area over the last 25 years is 10.48 inches (Ruffner and Bair, 1985).

2.6.2 Flood Plain and Surface Water

The general direction of surface water flow is to the east into the southwardly flowing DuPage River, which is the eastern border of the facility. The facility has constructed a retention pond east of the new engineering building. The retention pond gathers the surface runoff, which is then directed eastward, toward the DuPage River. The facility is on a 100-year floodplain (FEMA, 1982). The Lily Cache Creek is approximately 0.75 mile to the east. The Des Plaines River is approximately 6 miles to the east. The DuPage and Des Plaines Rivers are used for recreational and commercial purposes, as is the Chicago Sanitary and Ship Canal, which is adjacent to the Des Plaines River.

2.6.3 Geology and Soils

No site-specific information was available for the CBI Research facility, so the following discussion, based on regional geologic information, is presented. The main features of the northeastern Illinois landscape are the result of glaciation (Bergstrom, et al., 1955). Soils are formed in glacial till with a relatively high clay content (USDA, 1980). The soil structure is fairly graded and well drained to sewers and low-lying areas. The water carrying capacity and permeability of the soil are considered moderate.

The varied glacial and bedrock materials deposited are the result of streams and rivers that flowed from the glaciers. The area is on a broad, gently sloping arch of Paleozoic bedrock formation overlain by glacial deposits, called drift. These deposits mantle most of the area and consist of unconsolidated till, silt, clay, sand, gravel, and peat (Willman, 1971). The glacial deposits form an irregular surface that covers the solid layered bedrock at the site. The drift is underlain by Silurian dolomite bedrock which lies unconformable on rocks of the Maquoketa Group.

The Cambrian system rock is marine in origin. Its lower half is largely sandstone and the upper half consists of dolomites, sandy dolomites, sandstones, and siltstones. Sandstones of the Eau Claire Formation, which dominate in the vicinity of the site, are 370 to 470 feet thick (Willman, 1971). The Eau Claire Formation is composed of a variety of rock types including sandstones, siltstones, dolomite, and shale in the upper and middle part. The lower part is composed of rock similar to Mt. Simon Sandstone, which is present throughout the area (Hughes, et al., 1966). The base is the top of Precambrian crystalline rock (Hughes, et al., 1966). The depth of crystalline rock ranges from 3,750 feet to 4,250 feet around the facility.

The thickness of the unconsolidated till ranges from 50 feet to 250 feet in the area (USDA, 1980). Shallow sand deposits are mainly fine-grained and silty; for ground water supplies, drilled wells usually penetrate solid bedrock (Bergstrom, et al., 1955).

2.6.4 Ground Water

In the vicinity of the site ground water is obtained from four major aquifers: (1) sand and gravel beds in the glacial drift; (2) shallow dolomite aquifers, mainly the Silurian Dolomite; (3) the Cambrian-Ordovician aquifer, in which the Ironton-Galesville and Glenwood-St. Peter Sandstones are the most productive units; and (4) the Mt. Simon aquifer, which consists of the Mt. Simon Sandstone and the basal sandstone of the Eau Claire Formation (Willman, 1971). Ground water flows north, northwest in the area (Village of Plainfield, 1992).

In Will County, ground water supplies are obtainable from 50 feet to 150 feet deep in sand and gravel within the glacial drift. The best possibilities for high capacity wells in sand and gravel are where the drift is generally over 100 feet thick (Bergstrom, et al., 1955). Some wells penetrate through the drift and obtain water from open cracks and crevices in the dolomite.

The shallow bedrock aquifer system yields water through fractures and solution openings and is recharged from precipitation. Shallow wells have the advantage of rapid recharge but their limitations include erratic yield because of irregular permeability and susceptibility to contamination (Hughes, et al., 1966).

The deep bedrock aquifer systems include the Cambrian-Ordovician system and the Mt. Simon system. The major aquifers are the Glenwood-St. Peter, Ironton-Galesville, and Mt. Simon Sandstones. The top of the Cambrian-Ordovician aquifer system is at the top of or within the Galena-Platteville dolomites. the Cambrian-Ordovician and the Mt. Simon aquifers are separated by relatively impermeable shales and dolomites of the upper and middle part of the Eau Claire formation and are included with the Mt. Simon sandstone as the Mt. Simon aquifer system.

The wells in the deep bedrock aquifer system yield in excess of 700 gallons per minute (gpm) and are dependable for large supplies of water. The Galena-Platteville Dolomite contributes little water because of slow permeability. The Glenwood-St. Peter Sandstone, beneath the Galena-Platteville dolomite, is widely utilized where water requirements are less than 200 gpm. It has a permeability of approximately 9 to 15 gallons per day/square-foot (gpd/sq. ft.) while the underlying Ironton-Galesville Sandstone has a permeability of about 35 gpd/sq. ft. The Mt. Simon aquifer system lies at approximately 1,650 feet below the surface and about 270 feet of fresh water-bearing sandstone can be expected. The Mt. Simon system has an average permeability of approximately 16 gpd/sq. ft. Water wells rarely penetrate more than a few hundred feet into this system because the water is too highly mineralized for most uses (Hughes, et al., 1966).

2.7 RECEPTORS

The CBI Research facility occupies 130 acres in an industrial and agricultural area in Plainfield, Illinois. Plainfield has a population of about 3,500.

The CBI Research is bordered on the north by agricultural land, on the west by Kerr Glass Company, on the south by agricultural land, and on the east by the DuPage River. Private residences are on the east side of the DuPage River. The nearest school, St. Mary's School, is located about 2 miles south of the facility. Facility access is controlled by an 8-foot high chain-link fence.

The nearest surface water body, the DuPage River, is the eastern border of the facility, and is used for recreational and commercial purposes. Other water bodies in the area include the Lily Cache Creek, located about 0.75 mile east of the facility; Lake Renwick, located about 1.5 miles south of the facility; and the Des Plaines River, located about 6 miles east of the facility.

The Village of Plainfield provides drinking water and sanitary services for the facility and the surrounding area through the use of two on-line deep wells. These two wells are located 0.5 mile west and 0.75 mile south of the facility (Village of Plainfield, 1992). Kerr Glass Company, located on the west border of the facility, maintains an industrial well.

Sensitive environments are not located on site. The nearest wetland area is located about 0.5 mile east of the facility, at an abandoned strip mine area (USDI, 1983).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the four SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and RAI observations. Figure 2 shows the SWMU locations.

SWMU 1	**Hazardous Waste Satellite Accumulation Area**
Unit Description:	The Hazardous Waste Satellite Accumulation Area is located indoors, in the basement of the laboratory building, near the machining area. The unit is a 55-gallon steel drum with a metal funnel at the top (see Photograph No. 4). The unit accumulates small quantities of wastes generated during R & D activities. Once full, the drum is taken to the Hazardous Waste Storage Pad (SWMU 2). The drum is on a concrete floor. There are no floor drains near this unit.
Date of Startup:	This unit began operation in 1986.
Date of Closure:	This unit is active.
Wastes Managed:	This unit is currently managing waste degreasers (F002), waste paints (F003, F005), waste paint-related materials (F003, F005), spent solvent (F003), waste oil, and spent coolant.
Release Controls:	This unit is located indoors, on a concrete floor. There are no floor drains near this unit.
History of Documented Releases:	No releases from this unit have been documented.

Observations: This unit has not been filled since it began operation in 1986. The concrete floor appeared sound and there were no visual signs of cracking. No evidence of release was noted.

SWMU 2 **Hazardous Waste Storage Pad**

Unit Description: The Hazardous Waste Storage Pad is located outdoors, in the materials yard, about 100 feet east of the wave tank building. This unit stores hazardous wastes (and occasionally nonhazardous wastes) for less than 90 days. The unit is a concrete pad measuring 20 feet by 15 feet with a 6-inch berm around the perimeter of the pad (see Photographs No. 5 and 6). A convexed ramp provides easy loading/unloading of drums without disrupting the secondary containment. There is an 8-foot high chain-link fence with a locked gate surrounding the unit. The Hazardous Waste Storage Tank (SWMU 3) rests on the concrete pad within the fenced unit. There are no storm drains inside the unit.

Date of Startup: The unit began operation in 1982.

Date of Closure: The unit is currently active; however, the facility is preparing a closure plan. According to the facility representative, closure should be completed 165 days after the start of closure activities.

Wastes Managed: The unit manages all hazardous wastes generated at the facility. Hazardous wastes are stored in 55-gallon steel drums or in lab-packs. This unit has also stored nonhazardous ethylene glycol during a one-time tank pump-out generation. For a complete list of all wastes managed at this unit, see Attachment C.

Release Controls: This unit has a 6-inch berm around the perimeter of the pad.

History of Documented Releases: No releases from this unit have been documented.

Observations: There was no waste being stored at this unit at the time of the VSI. There is a slight crack running from east to west across the center of the pad and berm. There are two 200-gallon empty fuel oil tanks that were inadvertently brought into the unit by a former employee. No evidence of release was noted at this unit.

SWMU 3 **Hazardous Waste Storage Tank**

Unit Description: The Hazardous Waste Storage Tank is located inside the Hazardous Waste Storage Pad (SWMU 2). The unit was used to store hazardous waste which was allowed to blend in order to improve fuel blending potential. Once the unit was full, the hazardous waste was pumped out and placed into 55-gallon steel drums, which were stored at SWMU 2. The unit is a 1,000-gallon aboveground steel tank with metal supports which keep the tank elevated about 3 inches above the concrete pad (see Photograph No. 6).

Date of Startup: This unit began operations in 1982.

Date of Closure: The unit has been inactive since 1986 and will be closed along with SWMU 2. A closure plan is being prepared and will be submitted to IEPA. The facility representative estimates that closure will be completed 165 days after the start of closure activities.

Wastes Managed: This unit managed waste degreasers (F002), waste paints (F003, F005), waste paint-related material (F003, F005), spent solvent (F003), and nonhazardous waste oils and spent coolant.

Release Controls:	This unit rests on SWMU 2 which has a 6-inch high berm around the perimeter of the pad.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	According to the facility representative, the only waste that may still be inside the unit is sludge. The sludge will be removed and properly disposed of during closure activities. No evidence of release was noted at this unit.

SWMU 4 **Asbestos Waste Storage Area**

Unit Description:	The Asbestos Storage Area is located outdoors, in the materials yard, about 100 feet north of the Hazardous Waste Storage Pad (SWMU 2). The unit is located in one of the staging areas for undetermined product. The unit stores asbestos waste generated during a cooling tower inspection. The unit consists of 70-gallon steel salvage drums resting on wooden pallets above a gravel ground cover (see Photograph No. 2).
Date of Startup:	This unit began operation in approximately 1989.
Date of Closure:	This unit is active.
Wastes Managed:	This unit manages asbestos waste.
Release Controls:	The drums used in this area are normally sealed; however, during the VSI, one drum of asbestos waste was open.
History of Documented Releases:	No releases from this unit have been documented.

ATTACHMENT A

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

CBI Research Corporation
Plainfield, Illinois 60544
ILD 082 939 588

Date:	March 3, 1992
Facility Representatives:	Douglas Hansen, Manager of Research Services
Inspection Team:	Peter M. McLaughlin, Resource Applications (RAI) Alan Supple, RAI
Photographer:	Alan Supple, RAI
Weather Conditions:	Calm, overcast, temperature about 40°F
Summary of Activities:	The visual site inspection (VSI) began at 9:15 a.m. with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. The facility representative then discussed the CBI Research facility's past and current operations, solid waste generated, and history of documented releases. Most of the information was exchanged on a question-and-answer basis. The CBI Research facility representative provided the inspection team with copies of documents requested. The VSI tour began at 11:30 a.m. The laboratory building, wave tank, materials yard, and all materials staging areas were inspected. During this time photographs were taken of the Hazardous Waste Satellite Accumulation Area (SWMU 1), Hazardous Waste Storage Pad (SWMU 2), Hazardous Waste Storage Tank (SWMU 3), and Asbestos Waste Storage Area (SWMU 4). No AOCs were identified during the VSI. The tour concluded at 12:45 p.m., after which the inspection team held an exit meeting with the facility representative. The VSI was completed and the inspection team left the facility at 1:15 p.m.

Observations:	During the VSI, one drum of asbestos waste was being stored. The drum was not covered. No evidence of release from this unit was noted.

4.0 AREAS OF CONCERN

RAI identified one AOC during the PA/VSI. This AOC is discussed below; its location is shown in Figure 2.

AOC 1 Tank Farm

The Tank Farm (AOC 1) consisting of three aboveground tanks: one 18,500-gallon steel floating-roof tank, which stored petroleum products; one 11,500-gallon steel tank which stored ethylene glycol; and one 11,000-gallon concrete tank, which stored liquified natural gas (LNG). The petroleum product and LNG tanks have not been used since 1981. The ethylene glycol tank was emptied in 1990 and is no longer in use. The tank farm was used to perform emissions testing on floating-roof tanks. The ground area surrounding the Tank Farm is gravel cover over soil. No releases from these tanks have been documented; however, neither integrity tests nor soil sampling have been performed for these tanks. Until the soil surrounding the tanks is sampled for evidence of release, and/or the tanks are found to be tight, this area should be considered an AOC.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified four SWMUs and one AOC at the CBI Research facility. Background information on the facility's location, operations, waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are RAI's conclusions and recommendations for each SWMU and AOC. Table 3 summarizes the SWMUs and AOC at the CBI Research facility and recommended further actions.

SWMU 1 **Hazardous Waste Satellite Accumulation Area**

Conclusions: The Hazardous Waste Satellite Accumulation Area is used to accumulate small quantities of wastes generated during R & D activities. The drum currently used at this unit has not been filled since the unit began operations in 1986. The unit is located indoors, away from floor drains, and has no history of release. The unit has a low potential for release to ground water, surface water, air, and on-site soils.

Recommendations: RAI recommends no further action for this unit.

SWMU 2 Hazardous Waste Storage Pad

Conclusions: The Hazardous Waste Storage Pad is used to store all hazardous wastes for less than 90 days prior to off-site disposal. No wastes were being stored at the time of the VSI. The facility is preparing a closure plan to close this unit and the Hazardous Waste Storage Tank (SWMU 3). The unit has a low potential for release to ground water, surface water, air, and on-site soils.

Recommendations: RAI recommends no further action for this unit.

TABLE 3

SWMU AND AOC SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
1. Hazardous Waste Satellite Accumulation Area	1986 to present	None	No further action.
2. Hazardous Waste Storage Pad	1982 to present	None	No further action.
3. Hazardous Waste Storage Tank	1982 to 1986	None	No further action.
4. Asbestos Waste Storage Area	Approximately 1989 to present	None	Manage waste so as to minimize potential for release.

AOC	Dates of Operation	Evidence of Release	Recommended Further Action
1. Tank Farm	1976 to 1990	None	Integrity tests of tanks and/or soil sampling for evidence of release.

SWMU 3 **Hazardous Waste Storage Tank**

Conclusions: The Hazardous Waste Storage Tank was used to store and blend hazardous wastes. When full, the hazardous wastes were pumped into 55-gallon steel drums and prepared for off-site disposal. This unit is to be closed and removed due to lack of use. No releases have been documented from this unit. The unit has a low potential for release to ground water, surface water, air, and on-site soils.

Recommendations: RAI recommends no further action for this unit.

SWMU 4 **Asbestos Waste Storage Area**

Conclusions: The Asbestos Waste Storage Area stores asbestos waste generated during an inspection of the facility cooling tower. Asbestos waste is stored in a 70-gallon steel salvage drum. The asbestos waste is expected to be removed from the facility upon completion of the laboratory remodelling and cooling tower upgrade. The potential for release to environmental media is detailed below.

Ground Water: Low. Due to the nature of the waste managed, this unit has a low potential for release to ground water.

Surface Water: Low. Due to the nature of the waste managed, this unit has a low potential for release to surface water.

Air: Moderate. During the VSI, one drum of asbestos waste was stored without a lid. The asbestos may become airborne during windy conditions.

On-Site Soils: Low. Due to the nature of the waste managed, this unit has a low potential for release to on-site soils.

Recommendations: RAI recommends that the waste be managed in such a way as to minimize potential for release to environmental media.

AOC 1 **Tank Farm**

Conclusions: The Tank Farm stored petroleum products, LNG, and ethylene glycol used during emissions testing of floating-roof tanks. The aboveground tanks are no longer used. Neither integrity tests nor soil sampling have been performed. The area surrounding the tanks consists of gravel cover over soil. The potential for release to environmental media is detailed below.

Ground Water: Low. The tanks are empty and no longer used.

Surface Water: Low. The tanks are empty and no longer used.

Air: Low. The tanks are empty and no longer used.

On-Site Soils: Moderate. The tanks are old and their integrity is undetermined. A release to on-site soil may have occurred.

Recommendations: RAI recommends that the integrity of the tanks be evaluated and/or the soil surrounding the tanks be sampled for evidence of release.

REFERENCES

Bergstrom, R.E., J.W. Foster, L.F. Selkreeg, W.A. Pryor, 1955. "Groundwater Possibilities in Northeastern Illinois", Illinois State Geological Survey Circular 198, Urbana, Illinois.

CBI Research Corporation (CBI Research), 1985. Letter notifying EPA of operator name change, March 12.

CBI Research, 1988. Revised RCRA Part A permit application, February 17.

CBI Research, 1992. Telephone conversation between Peter McLaughlin (RAI) and Douglas Hansen (CBI Research), March 11.

Chicago Bridge & Iron Company (Chicago Bridge & Iron), 1980a. Notification of Hazardous Waste Activity, August 11.

Chicago Bridge & Iron, 1980b. RCRA Part A permit application, November 12.

Environmental Protection Agency (EPA), 1988a. Notice of Violation (NOV) regarding land disposal requirements of F-solvent wastes, March 10.

EPA, 1988b. Letter of compliance for NOV of March 10, 1988, April 22.

EPA, 1990a. NOV regarding inadequate waste manifests, January 24.

EPA, 1990b. Letter of compliance for NOV of January 24, 1990, February 7.

Federal Emergency Management Agency (FEMA), 1982. National Flood Insurance Program, Village of Plainfield, Illinois, Will County Community-Panel No. 170771 0001, November 17.

Hughes, G.M., P. Kratz, and R.A. Landon, 1966. "Bedrock Aquifers of Northeastern Illinois". Illinois State Geological Survey Circular 406, Urbana, Illinois.

Illinois Environmental Protection Agency (IEPA), 1986. Compliance Inquiry Letter (CIL) listing violations noted during a February 14, 1986 inspection, and stating compliance was met on February 19, 1986, March 21.

IEPA, 1988a. CIL listing several violations noted during a December 8, 1987 inspection, February 5.

IEPA, 1988b. Compliance letter for all violations noted during December 8, 1987 inspection, April 27.

Ruffner, J.A., 1985. Climates of the States. Gale Research Company, Detroit.

Ruffner, J.A., and E. Bair, 1985. Weather of U.S. Cities. Gale Research Company, Detroit.

U.S. Department of Agriculture (USDA), 1980. "Will County Soils, Will County, Illinois". Soil Conservation Service/Illinois Agriculture Experiment Station.

U.S. Department of Commerce, (USDC), 1968. Climate Atlas of the United States. U.S. Printing Office, Washington, D.C.

U.S. Geological Survey (USGS) 1980a. Normantown, Illinois, Topographic Quadrangle 7.5-Minute Series.

USGS, 1980b. Plainfield, Illinois, Topographic Quadrangle 7.5-Minute Series.

U.S. Department of Interior (USDI), 1983. National Wetlands Inventory map, Normantown, Illinois, 1983.

Village of Plainfield, 1992. Conversation between Rob Singh (RAI) and Harry Countyman (Village of Plainfield Water Department), March 30.

Willman, H.B., 1971. "Summary of the Geology of the Chicago Area." Illinois State Geological Survey Circular 460, Urbana, Illinois.

Photograph No. 1 Location: Near SWMU 1
Orientation: East Date: 3/3/92
Description: This inactive paint spray booth serves as a staging area for material whose usefulness needs to be determined. If the material is found to be unusable it will be managed as waste. The paint spray booth will serve as a temporary hazardous waste storage area if the Hazardous Waste Storage Pad (SWMU 2) must be removed during closure.

Photograph No. 2 Location: SWMU 4
Orientation: Southeast Date: 3/3/92
Description: The salvage drum on the right contains asbestos waste. All other drums are staged and awaiting usefulness determination. If found unusable, the material will be managed as waste.

Photograph No. 3 Location: Near SWMU 4
Orientation: North Date: 3/3/92
Description: This 20-foot transport container is the staging area for material that was used during a Chicago Bridge & Iron project in the Persian Gulf. If the material is found to be unusable, it will be managed as waste.

Photograph No. 4 Location: SWMU 1
Orientation: North Date: 3/3/92
Description: This unit has not been filled since it began operation in 1986. Wastes generated during R & D activities are accumulated here.

Photograph No. 5 Location: SWMU 2
Orientation: South Date: 3/3/92
Description: This unit will undergo RCRA closure. The two 200-gallon fuel oil tanks are empty. No wastes were being stored here at the time of the VSI.

Photograph No. 6 Location: SWMU 2 and SWMU 3
Orientation: North Date: 3/3/92
Description: This unit rests on the Hazardous Waste Storage Pad (SWMU 2). It will undergo RCRA closure and be removed. It has not stored hazardous waste since 1986.

ATTACHMENT B

VISUAL SITE INSPECTION FIELD NOTES

3/3/92 CB1 RESEARCH 9:15

CURRENTLY PREPARING CLOSURE PLAN FOR TANK

WET CHEM LAB IS CURRENTLY INACTIVE

TANK FARM - EMPTY

- WERE USED FOR EMISSIONS TESTING
- PETRO PRODUCTS
- ETHYLENE GLYCOL : LAST CONTENTS DROP TEST QUIT 1989

CURRENTLY UNDER CONSTRUCTION:

- ENGINEERING BLDG
- 3 STORY 75,000 FT²
- ON OLD PARKING LOT

RETENTION BASIN FOR STORM WATER 1991

130 ACRES

DUPAGE RIVER : EAST BORDER

SANITARY SEWER PLAINFIELD TREATMENT WORKS

G.W. WELL @ KERR GLASS

BLDG BUILT BY CONT CAN 1959

DORMANT 1963 - 1967

1967 - CB1

PRIOR TO 1959 - AG LAND

BASEMENT - LABS

SPRAY BOOTH - NOT USING (STRIPPING METAL)

MACHINE SHOP

3/3/92 Pat M. McVeigh

BASIC PROCESSES R+D

MACHINE GROUP

- TEST FACILITY FOR OFF-SHORE STRUCTURES
- FABS OF MODELS
- PHYSICAL TESTING IN WAVE TANK

STRUCTURAL RESEARCH

- ENGRG LOCATION OF BLDG

PRODUCTS RESEARCH GROUP

- PROCESS RELATED WORK
- CONCEPTUAL PLANS (PILOT)

DEVELOPMENT GROUP

- DEV. CB1 GROUP PRODUCTS
- FLOATING ROOF TANK EMISSIONS
- WIND TUNNEL FOR EVAP. ON FITTINGS

18 MONTHS - 2 YRS

OLD PAINT PRODUCTS

SLUDGES LIQ, SOLIDS

ETHYLENE GLYCOL UNITS IF

ONE-TIME CLEANOUT IN TANK

LAB PACK OFF-SPEC/OLD CHEMS

- GROUPED

3/3/92 Pat M. McVeigh

WASTE FLAM LIQ. 385 g D001/F003
WASTE CORROSIVE 145 g D002
WASTE COMPRESSED GAS 5 g D001
WASTE OXIDIZER 30 g D001/D007

WILL GET COPY OF WASTE MANIFEST FOR '91

FIW, INC. PECATONICA, IL
- INCINATE OLD CHEMS

SUITS SMALL Q WASTE OILS & COOLANTS
ASBESTOS SPECIAL WASTE TO AFR LANDFILL
GRAYSLAKE
UNIVERSAL ASBESTOS REMOVAL
- BRIDGEVIEW, IL
ETHYLENE GLYCOL: EFFLUENT TECHNOLOGY
McCOOK, IL
PAINT WASTE SAFETY-KLEEN DOLTON, IL
- INCIN

FREEZE WORK FOR THERMAL ENERGY SOURCE
MARINE WORK - CLASSIFIED
CRYSTAL GROWTH

3/3/92 Pete M. McGough

FACILITY: 39 EMPLOYS
ENG 37
CONSUL 2
} ~ 60

225 TO NEW ENG BUILD
NO RELEASES

CLOSURE DUE TO LACK OF USE
AWARE ENVIRONMENTAL CHARLOTTE NC
DRAFT PROPOSAL FOR 1ST SUBMIT TO IEPA
LAST PUMP 1986
TANK WILL BE REMOVED
SCA CHEMICAL SERVICES CHICAGO IL
- INCIN.
REMOVE PAD
TEMP AREA IN SPRAY PAINT BOOTH
PROPOSED DATE OF COMPLETION
165 DAYS FROM START

PLAINFIELD - 3500 PEOPLE
DOUBTS STORED FOR > 90 DAYS
WILL BE SMALL Q GEN.
NO PERMITS

3/3/92 Pete M. McGough

STAGING AREAS:
- SPRAY BOOTH
- 20FT CONTAINER IN RAIL YARD
- DRUMS

RETENTION OVER FLOW WOULD GO TO RIVER
EXCESS PROPERTY LEASED TO FARMER
1979 CHICAGO BRIDGE & IRON CO
1985 CBI RESEARCH CORP.

VS1 11:30
OILS, ORGANICS
DUMPED INTO SATELLITE
OR LAB PACK
SOME WATER SAMPLES IN LAB

① E SPRAY BOOTH LOW BAY
STAGING FOR PRODUCTS TO BE DETERMINED
PAINTS, PETRO PRODUCTS, GLUE

② N SCRAP METAL
CARBON S.S. ALUM
- FULLY RECYC.

③ N H.W. ACCUM: BASEMENT
VARIETY OF WASTES GEN.

3/3/92 Rick M. McGuffin

OILS, DEGREASERS TOLUENE BENZENE
PAINT

④ N 6 V.I. TANK WOOD & CS
ADD BOTTOMS
HAIR LINE CRACK IN PAD & BERM
6" BERM
NO WASTE AT VS1

⑤ PAD
FUEL OIL TANKS EMPTY
PROPANE IN BY X EMPLOYEE
MAY 91 LAST STORAGE

⑥ N SCRAP

⑦ SE ASBESTOS SALVAGE OPEN
OTHERS BEING STAGED

⑧ N 1981 PERSIAN GULF DAS ISLAND
ISOCYANATE
SURFACE COATINGS
20' CONTAINER

3/3/92 Rick M. McGuffin

ATTACHMENT C

FACILITY'S RCRA PART A PERMIT APPLICATION

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F ILD082939588

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill—in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill—in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold—faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X	
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: CBI RESEARCH CORPORATION

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
2 LASKA LAWRENCE MGR. RES. SERV.	815 436 2912

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 501 DIVISION STREET

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 PLAINFIELD	IL	60544

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 ROUTE 59

B. COUNTY NAME: WILL

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
6 PLAINFIELD	IL	60544	

VII. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
3443 (specify) FABRICATED PLATE WORKS (BOILER SHOP)	1629 (specify) HEAVY CONSTRUCTION NOT ELSEWHERE SPECIFIED & R&D
C. THIRD	**D. FOURTH**
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME: CBI RESEARCH CORPORATION

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL; M = PUBLIC (other than federal or state); S = STATE; O = OTHER (specify); P = PRIVATE
P (specify) PRIVATE

D. PHONE (area code & no.): A 815 436 2912

E. STREET OR P.O. BOX: 1501 N. DIVISION STREET

F. CITY OR TOWN: PLAINFIELD

G. STATE: IL

H. ZIP CODE: 60544

IX. INDIAN LAND
Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions from Proposed Sources)
9 N	9 P
B. UIC (Underground Injection of Fluids)	**E. OTHER (specify)**
9 U	9 (specify)
C. RCRA (Hazardous Wastes)	**E. OTHER (specify)**
9 R ILD082939588	9 (specify)

MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

CBI Research Corp. provides R&D for the entire range of CBI Industry Product Lines and outside related funded Research. CBI Industries is engaged in the design, fabrication and construction of large metal plate products, structures and related systems, and thus acts as a service industry to other industries, utilities and governmental bodies. The company's principal products include petroleum, petro-chemical and chemical storage tanks, process and pressure or vacuum vessels, nuclear reactor and containment vessels, water storage tanks, low temperature and cryogenic liquefaction and storage facilities, hydroelectric penstocks, spiral cases, tunnel liners and surge tanks, fixed and shipmounted marine structures, oxygen converter vessels, tanks and bins for granular storage, water and waste treatment equipment and specialty gases such as CO_2 to industry.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
JON HAGSTROM PRESIDENT - DIRECTOR OF RESEARCH	Jon Hagstrom	2/17/85

COMMENTS FOR OFFICIAL USE ONLY

C

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE PERMIT APPLICATION
Consolidated Permits Program
(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER: F I L D 0 8 2 9 3 9 5 8 8

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr. mo. & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*: 8 | YR. | MO. | DAY

☐ 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN: YR. | MO. | DAY

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

☐ 1. FACILITY HAS INTERIM STATUS

☒ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.
1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided: Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP N/A C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G	
X-2	T03	20	E	
1	S01	1000	G	
2	S01	1100	G	
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
5				
6				
7				
8				
9				
10				

CONTINUE ON REVERSE

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY – For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non–listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE
POUNDS	P
TONS	T

METRIC UNIT OF MEASURE	CODE
KILOGRAMS	K
METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1): WILD082939588 | T/A: C | 1

FOR OFFICIAL USE ONLY: W | DUP | T/A: C | 2 | DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	F001	10	P	S01	
2	F005	10	P	S01	
3	P018	10 BRUCINE	P	S01	
4	P105	10 SODIUM AZIDE	P	S01	
5	P106	10 SODIUM CYANIDE	P	S01	
6	U001	20	P	S01	
7	U002	20 ACETONE	P	S01	
8	U013	20	P	S01	
9	U019	400 BENZENE	P	S01	
10	U021	10 BENZIDINE	P	S01	
11	U029	10 METHYL BROMIDE	P	S01	
12	U044	10 CHLOROFORM	P	S01	
13	U112	10 ETHYL ACETATE	P	S01	
14	U123	10 FORMIC ACID	P	S01	
15	U134	10 HYDROGEN FLUORIDE	P	S01	
16	U135	10 HYDROGEN SULFIDE	P	S01	
17	U140	20 ISOBUTYL ALCOHOL	P	S01	
18	U147	10 MALEIC ANHYDRIDE	P	S01	
19	U151	10 MERCURY	P	S01	
20	U154	10 [redacted] METHANOL	P	S01	
21	U159	10 MEK	P	S01	
22	U161	10 METHYL ISOBUTYL KETONE	P	S01	
23	U165	10 NAPTHALENE	P	S01	
24	U169	10 NITROBENZENE	P	S01	
25	U188	10 PHENOL	P	S01	
26	U190	10 PHTHALIC ACID	P	S01	

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-580004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
WILD082939588 T/A C 1	W DUP T/A C 2 DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
27	U196	10 PYRIDINE	P	S01	
28	U213	10 TETRAHYDROFURAN	P	S01	
29	U219	10 THIOUREA	P	S01	
30	U220	50 TOLUENE	P	S01	
31	U223	4000 TOLUENE DIISOCYANATE	P	S01	
32	U226	400 TCA	P	S01	
33	U239	100 XYLENES	P	S01	
34	F002	1000	P	S01	
35	D001	1000	P	S01	

A Form 3510-3 (6-80)

CONTINUE ON REVERSE

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)

F | I | L | D | 0 | 8 | 2 | 9 | 3 | 9 | 5 | 8 | 8 | TIN C: 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground-level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
41 37 02 S	088 12 00 W

VIII. FACILITY OWNER

__ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)
E	

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F	G		

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
JON HAGSTROM	Jon Hagstrom	2/17/88

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED

YE

CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE

Completed by: Mary Wojciechowski
Date: June 4, 1992

Background Facility Information

Facility Name: CBI Research Corporation
EPA Identification No.: ILD 082 939 588
Location (City, State): Plainfield, Illinois
Facility Priority Rank: Low

1. Is this checklist being completed for one solid waste management unit (SWMU), several SWMUs, or the entire facility? Explain.

Entire Facility
4 SWMUs
1 AOC

Status of Corrective Action Activities at the Facility

2. What is the current status of HSWA corrective action activities at the facility?

( ) No corrective action activities initiated (Go to 5)
(X) RCRA Facility Assessment (RFA) or equivalent completed
( ) RCRA Facility Investigation (RFI) underway
( ) RFI completed
( ) Corrective Measures Study (CMS) completed
( ) Corrective Measures Implementation (CMI) begun or completed
( ) Interim Measures begun or completed

3. If corrective action activities have been initiated, are they being carried out under a permit or an enforcement order?

( ) Operating permit
( ) Post-closure permit
( ) Enforcement order
( ) Other (Explain)

No corrective action has been initiated.

4. Have interim measures, if required or completed [see Question 2], been successful in preventing the further spread of contamination at the facility?

( ) Yes
( ) No
( ) Uncertain; still underway
(X) Not required

Additional explanatory notes:

There has been no documented releases to environmental media at this facility. There is a potential for release to air from an asbestos waste storage area and a potential for release to soil and ground water from an underground tank farm.

Facility Releases and Exposure Concerns

5. To what media have contaminant releases from the facility occurred or been suspected of occurring?

(X) Ground water
( ) Surface water
(X) Air
(X) Soils

6. Are contaminant releases migrating off-site?

( ) Yes; Indicate media, contaminant concentrations, and level of certainty.

Groundwater:
Surface water:
Air:
Soils:

(X) No
( ) Uncertain

7a. Are humans currently being exposed to contaminants released from the facility?

( ) Yes (Go to 8a)
(X) No
( ) Uncertain

Additional explanatory notes:

There has been no documented releases to environmental media at the facility.

7b. Is there a potential for human exposure to the contaminants released from the facility over the next 5 to 10 years?

( ) Yes
(X) No
( ) Uncertain

Additional explanatory notes:

There has been no documented releases to environmental media at the facility.

8a. Are environmental receptors currently being exposed to contaminants released from the facility?

( ) Yes (Go to 9)
(X) No
( ) Uncertain

Additional explanatory notes:

There has been no documented releases to environmental media at the facility.

8b. Is there a potential that environmental receptors could be exposed to the contaminants released from the facility over the next 5 to 10 years?

( ) Yes
(X) No
( ) Uncertain

Additional explanatory notes:

There has been no documented releases to environmental media at the facility.

Anticipated Final Corrective Measures

9. If already identified or planned, would final corrective measures be able to be implemented in time to adequately address any existing or short-term threat to human health and the environment?

   ( ) Yes
   (X) No
   ( ) Uncertain

   Additional explanatory notes:

There has been no documented releases to environmental media at the facility.

10. Could a stabilization initiative at this facility reduce the present or near-term (e.g., less than two years) risks to human health and the environment?

    (X) Yes
    ( ) No
    ( ) Uncertain

    Additional explanatory notes:

Secondary containment in an asbestos waste storage area would reduce the potential for a release to air.

11. If a stabilization activity were not begun, would the threat to human health and the environment significantly increase before final corrective measures could be implemented?

    ( ) Yes
    (X) No
    ( ) Uncertain

    Additional explanatory notes:

There has been no documented releases to environmental media at the facility.

Technical Ability to Implement Stabilization Activities

12. In what phase does the contaminant exist under ambient site conditions? Check all that apply.

    ( ) Solid
    ( ) Light non-aqueous phase liquids (LNAPLs)
    ( ) Dense non-aqueous phase liquids (DNAPLs)
    ( ) Dissolved in ground water or surface water
    ( ) Gaseous
    (X) Other None

13. Which of the following major chemical groupings are of concern at the facility?

    (X) Volatile organic compounds (VOCs) and/or semi-volatiles
    ( ) Polynuclear aromatics (PAHs)
    ( ) Pesticides
    ( ) Polychlorinated biphenyls (PCBs) and/or dioxins
    ( ) Other organics
    (X) Inorganics and metals
    ( ) Explosives
    (X) Other Asbestos

14. Are appropriate stabilization technologies available to prevent the further spread of contamination, based on contaminant characteristics and the facility's environmental setting? [See Attachment A for a listing of potential stabilization technologies.]

(X) Yes; Indicate possible course of action.
Secondary containment in an asbestos waste storage area would reduce the potential for a release to air.

( ) No; Indicate why stabilization technologies are not appropriate; then go to Question 18.

15. Has the RFI, or another environmental investigation, provided the site characterization and waste release data needed to design and implement a stabilization activity?

(X) Yes for the asbestos waste storage area
(X) No for the underground tank farm

If No, can these data be obtained faster than the data needed to implement the final corrective measures?

(X) Yes for the underground tank
( ) No farm

Timing and Other Procedural Issues Associated with Stabilization

16. Can stabilization activities be implemented more quickly than the final corrective measures?

(X) Yes
( ) No
( ) Uncertain

Additional explanatory notes:

17. Can stabilization activities be incorporated into the final corrective measures at some point in the future?

( ) Yes
( ) No
(X) Uncertain

Additional explanatory notes:

If it is determined that stabilization for an underground tank farm is needed; it might be feasible to include it into final corrective measures.

Conclusion

18. Is this facility an appropriate candidate for stabilization activities?

(X) Yes
( ) No, not feasible
( ) No, not required
( ) Further investigation necessary

Explain final decision, using additional sheets if necessary.

There has been no releases to environmental media at this facility. However, there are two areas where there is a potential for future releases.

There is a potential for a release to air from an asbestos waste storage area which lacks adequate containment 2) a release to soil or ground water from an underground tank farm which has never been leak tested. The tanks are used for storage of ethylene glycol and liquid natural gas.

Secondary containment would be an appropriate stabilization activity for the asbestos storage area.

Leak testing and soil sampling need to be conducted on the tank farm before the need for stabilization can be determined.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

February 25, 1992

Mr. Douglas Hansen
CBI Industries, Inc.
1501 N. Division St.
Plainfield, IL 60544

Re: Visual Site Inspection
CBI Industries, Inc.
ILD 082 939 588

Dear Mr. Hansen:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of the units at the facility and the waste management practices used.

Facility Name Chicago Bridge & Iron Co
Location (City, State) Plainfield Ill
EPA I.D.# ILD 082 939 588
Reviewer Name BF
Date of Review 3/17/86

SUMMARY OF FACILITY CERTIFICATION
REGARDING POTENTIAL RELEASES
FROM SOLID WASTE MANAGEMENT UNITS

(1) Are there any solid waste management units?

Yes X No _____ Undetermined _____

(2) If answer to (1) is Yes, list the units by type, number and operating status. If answer to (1) is No or undetermined, go to Question (5).

	Type of Unit	Status
a.	storage tank (above ground)	inactive
b.	containers	active
c.		
d.		
e.		
f.		
g.		
h.		
i.		
j.		

(3) For each type of unit listed in (2), summarize the types and volumes of wastes handled.

	Type of Unit	Type of Waste	Volume of Wastes
a.	storage tank (above ground)	(see attached page	4,000 gal capacity
b.	containers	mixed solvents, etc.	
c.		(see attached pages)	
d.			
e.			
f.			
g.			
h.			
i.			
j.			

(4) Summarize all releases of hazardous waste or constituents, and check box as to whether company claims it was fully corrected.

	Releases	Corrected?		
a.	_____	Yes ____	No ____	Undetermined ____
b.	_____	Yes ____	No ____	Undetermined ____
c.	_____	Yes ____	No ____	Undetermined ____
d.	_____	Yes ____	No ____	Undetermined ____
e.	_____	Yes ____	No ____	Undetermined ____
f.	_____	Yes ____	No ____	Undetermined ____
g.	_____	Yes ____	No ____	Undetermined ____
h.	_____	Yes ____	No ____	Undetermined ____
i.	_____	Yes ____	No ____	Undetermined ____
j.	_____	Yes ____	No ____	Undetermined ____

(5) Certification: Yes X No ____

(6) Is additional information necessary? Yes ____ No X

(7) Comments: ① Certification signed by Manager of Research Services — signature may not be adequate.

Chicago Bridge & Iron Co.

ATTACHMENT K

HAZARDOUS WASTE RECORD

EPA HAZARDOUS WASTE NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NO.	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED
NOS.	NON. FLAM.	POLYOID RESIN	UN 1760	1,485 gal.	1/1/78	5/13/82	PLFD. RESEARCH
P030	NON. FLAM.	ISOCYANATE	UN 2206	605 gal.	3/2/78	8/18/82	PLFD. RESEARCH
D001	FLAMMABLE	MIXED SOLVENTS	UN 1996	1,760	1/1/78	8/18/82	PLFD. RESEARCH
D002	CORROSIVE	POLYOID RESIN	UN 1760	275	6/10/82	5/26/83	PLFD RESEARCH
V109, V140, V154, V002	FLAMMABLE	MIXED SOLVENTS	NA 1993	990	9/1/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE OCTANE	UN 1262	495	7/3/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE ISOPENTANE	UN 1265	385	7/11/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE HEXANE	UN 1208	220	7/11/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE BENZENE	UN 1114	165	11/5/82	5/26/83	PLFD. RESEARCH

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
55 GAL. STEEL DRUM	013	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	3-13-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	018	FLAMMABLE	MIXED SOLVENTS	UN1993	55GAL.	3-17-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	012	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	4-8-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	016	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	5-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	017	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	5-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	014	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	5-15-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	019	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	5-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	015	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	6-10-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	033	FLAMMABLE	MIXED SOLVENTS	UN1993	20 GAL.	7-17-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	049	FLAMMABLE	MIXED SOLVENTS	UN 1993	10 GAL.	7-17-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	002	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	1-10-86		PLAINFIELD RESEARCH	

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
55 GAL. STEEL DRUM	029	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	031	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	032	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	036	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	037	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	038	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN1171	30 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	022	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	024	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	025	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	026	NON. FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	039	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	040	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	010	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	3-12-85		PLAINFIELD RESEARCH	

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
55 GAL. PLASTIC DRUM	044	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	045	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	046	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
30 GAL. PLASTIC DRUM	050	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	30 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	011	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	1-10-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	020	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	2-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	030	FLAMMABLE	MIXED SOLVENT	UN1993	55 GAL.	2-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	034	FLAMMABLE	MIXED SOLVENTS	UN1993	20 GAL.	2-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	035	FLAMMABLE	MIXED SOLVENTS	UN 1993	30 GAL.	2-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	021	FLAMMABLE	MIXED SOLVENTS	UN 1993	50 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	023	NON FLAM.	ETHYLENE GLYCOL (9%)	UN 1171	30 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	027	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	028	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
55 GAL. STEEL DRUM	001	FLAMMABLE	MIXED SOLVENTS	UN1996	55gal.	12-4-83		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	003	FLAMMABLE	ROOFING TAR	UN1996	55 GAL.	3-3-83		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	047	FLAMMABLE	MACHINE OIL	UN1270	55GAL.	5-5-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	051	FLAMMABLE	MACHINE OIL	UN1270	25 GAL.	5-5-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	004	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN1171	55 GAL.	12-7-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	005	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN 1171	55 GAL.	12-7-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	006	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN 1171	55GAL.	12-7-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	007	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN 1171	55 GAL.	12-7-84		PLAINFIELD RESEARCH	
55GAL. STEEL DRUM	008	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN 1171	55GAL.	12-7-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	009	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN 1171	55GAL.	12-7-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	041	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	042	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	043	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	

CERTIFICATION REGARDING POTENTIAL RELEASES FROM
SOLID WASTE MANAGEMENT UNITS

FACILITY NAME: CBI INDUSTRIES INC.

EPA I.D. NUMBER: ILD082939588

LOCATION CITY: PLAINFIELD

STATE: ILLINOIS

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTE UNITS CURRENTLY SHOWN IN YOUR PART A APPLICATION

	YES	NO
° Landfill		
° Surface Impoundment		
° Land Farm		
° Waste Pile		
° Incinerator		
° Storage Tank (Above Ground)	✓	
° Storage Tank (Underground)		
° Container Storage Area	✓	
° Injection Wells		
° Wastewater Treatment Units		
° Transfer Stations		
° Waste Recycling Operations		
° Waste Treatment, Detoxification		
° Other _____		

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed of and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions and location at facility. Provide a site plan if available.

Attached to this form you will find our site plan, waste quantities on hand, and waste quantities disposed of.

NOTE: Hazardous wastes are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part A application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or may still be occurring.

   Please provide the following information

   a. Date of release
   b. Type of waste released
   c. Quantity or volume of waste released
   d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

No release has ever taken place

4. In regard to the prior or continuing releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

N/A

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

L. J. Laska/Mgr. of Research Services
Typed Name and Title

L. J. Laska
Signature

Feb. 18, 1986
Date

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
55 GAL. STEEL DRUM	013	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	3-13-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	018	FLAMMABLE	MIXED SOLVENTS	UN1993	55GAL.	3-17-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	012	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	4-8-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	016	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	5-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	017	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	5-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	014	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	5-15-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	019	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	5-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	015	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	6-10-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	033	FLAMMABLE	MIXED SOLVENTS	UN1993	20 GAL.	7-17-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	049	FLAMMABLE	MIXED SOLVENTS	UN 1993	10 GAL.	7-17-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	002	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	1-10-86		PLAINFIELD RESEARCH	

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
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55 GAL. STEEL DRUM	032	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	036	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	037	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	038	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	30 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	022	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	024	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	025	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	026	NON. FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	039	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	040	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-7-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	010	FLAMMABLE	MIXED SOLVENTS	UN 1993	55 GAL.	3-12-85		PLAINFIELD RESEARCH	

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
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55 GAL. PLASTIC DRUM	045	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	046	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
30 GAL. PLASTIC DRUM	050	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	30 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	011	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	1-10-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	020	FLAMMABLE	MIXED SOLVENTS	UN1993	55 GAL.	2-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	030	FLAMMABLE	MIXED SOLVENT	UN1993	55 GAL.	2-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	034	FLAMMABLE	MIXED SOLVENTS	UN1993	20 GAL.	2-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	035	FLAMMABLE	MIXED SOLVENTS	UN 1993	30 GAL.	2-20-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	021	FLAMMABLE	MIXED SOLVENTS	UN 1993	50 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	023	NON FLAM.	ETHYLENE GLYCOL (9%)	UN 1171	30 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	027	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	
55 GAL. STEEL DRUM	028	NON FLAMMABLE	ETHYLENE GLYCOL (9%)	UN 1171	55 GAL.	3-5-85		PLAINFIELD RESEARCH	

HAZARDOUS WASTE RECORD

CBI INDUSTRIES, INC.

CONTAINER TYPE	CONTAINER NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NUMBER	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED	MANIFEST NUMBER
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55 GAL. STEEL DRUM	047	FLAMMABLE	MACHINE OIL	UN1270	55GAL.	5-5-84		PLAINFIELD RESEARCH	
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55 GAL. STEEL DRUM	004	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN1171	55 GAL.	12-7-84		PLAINFIELD RESEARCH	
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55 GAL. STEEL DRUM	006	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN 1171	55GAL.	12-7-84		PLAINFIELD RESEARCH	
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55GAL. STEEL DRUM	008	NON FLAMMABLE	9% ETHYLENE GLYCOL	UN1171	55GAL.	12-7-84		PLAINFIELD RESEARCH	
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55 GAL. PLASTIC DRUM	041	CORROSIVE	DILUTE SULFURIC ACID	UN1760	55GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLASTIC DRUM	042	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	
55 GAL. PLAST. DRUM	043	CORROSIVE	DILUTE SULFURIC ACID	UN 1760	55 GAL.	12-11-84		PLAINFIELD RESEARCH	

Chicago Bridge & Iron Co.

ATTACHMENT K

HAZARDOUS WASTE RECORD

EPA HAZARDOUS WASTE NUMBER	HAZARD CLASS	DESCRIPTION OF H/W	UN/NA NO.	QUANTITY	STORAGE DATE	DISPOSAL DATE	LOCATION STORED
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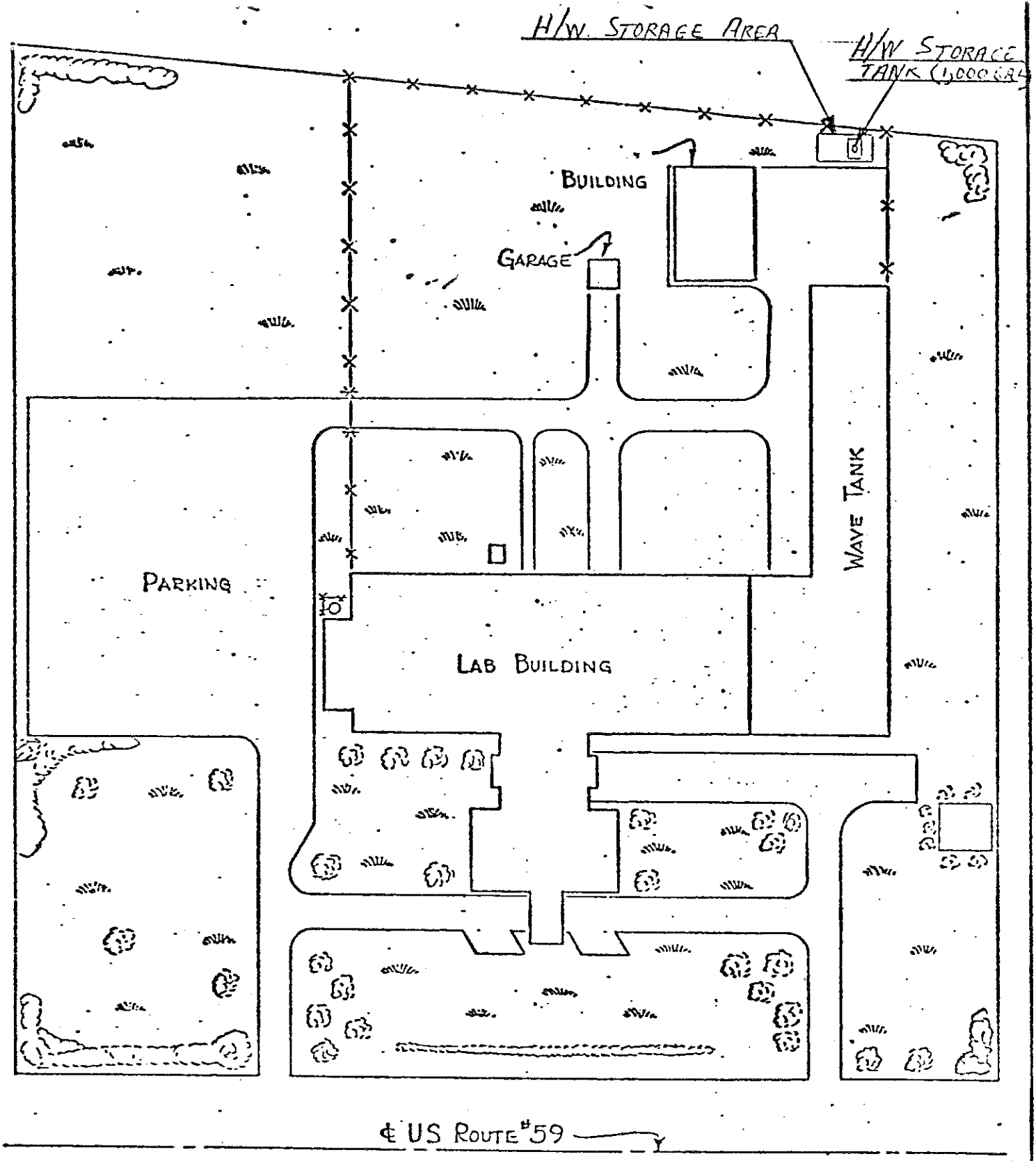
D001	FLAMMABLE	MIXED SOLVENTS	UN 1996	1,760	1/1/78	8/18/82	PLFD. RESEARCH
D002	CORROSIVE	POLYOID RESIN	UN 1760	275	6/10/82	5/26/83	PLFD RESEARCH
V109, V140, V154, V002	FLAMMABLE	MIXED SOLVENTS	NA 1993	990	9/1/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE OCTANE	UN 1262	495	7/3/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE ISOPENTANE	UN 1265	385	7/11/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE HEXANE	UN 1208	220	7/11/82	5/26/83	PLFD. RESEARCH
D001	FLAMMABLE	WASTE BENZENE	UN 1114	165	11/5/82	5/26/83	PLFD. RESEARCH



N

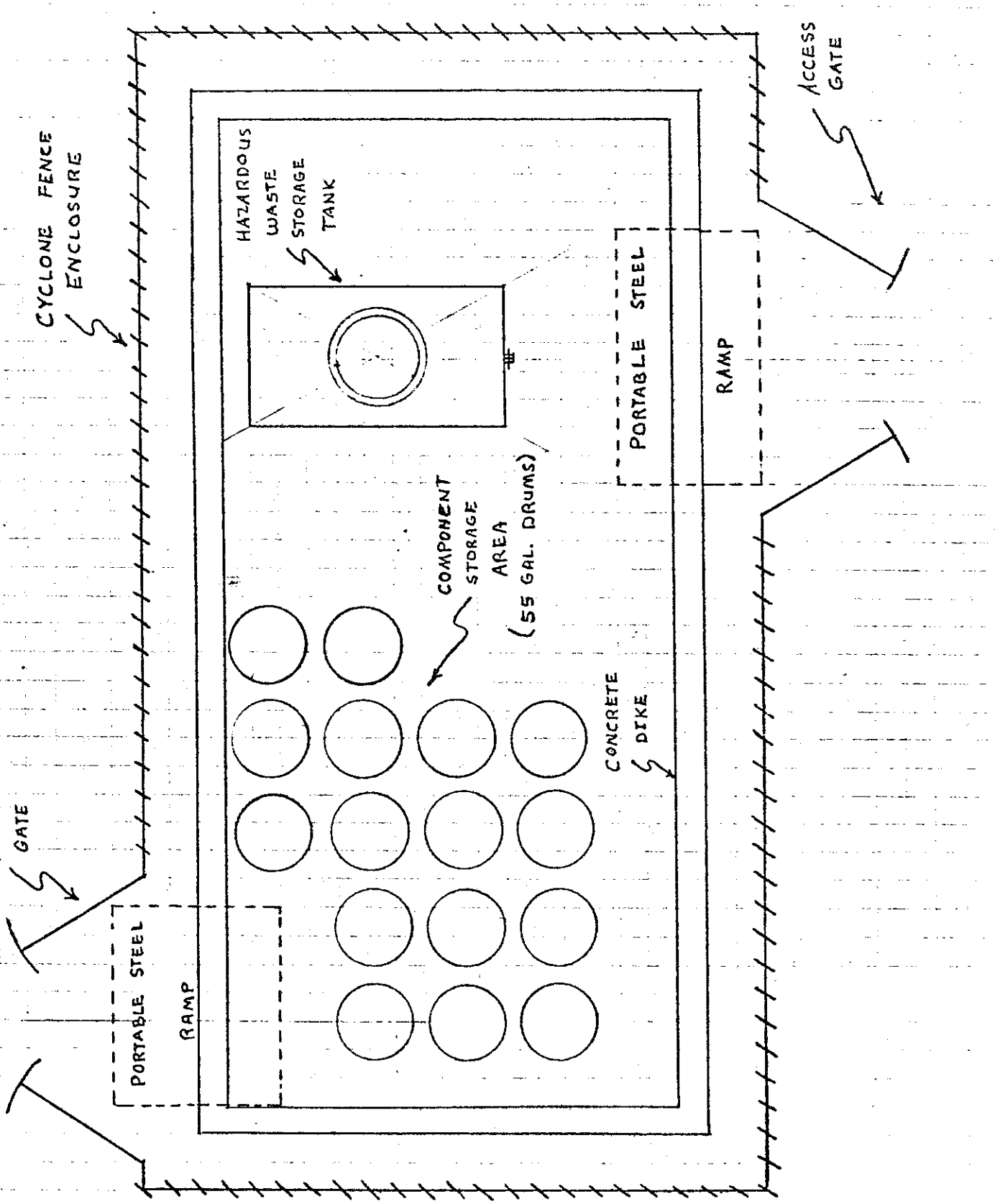
BUILDING LAYOUT OF
PLAINFIELD, ILLINOIS PROPERTY
CHICAGO BRIDGE & IRON CO.

0 50 100 200

SCALE 1" = 100'

ATTACHMENT B

Location _____



SUBJECT	MADE BY	CHKD BY	REV			CHARGE NO.
HAZARDOUS WASTE STORAGE	WHW			By		RSE 570
AREA	DATE 4/1/81	DATE		Chkd		SHT 1 OF 1
				Date		

GO 64 REV 4-73